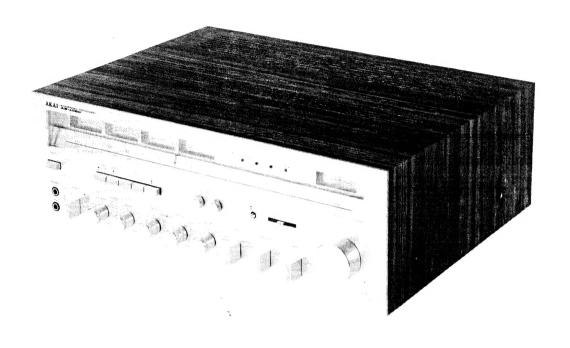
# SERVICE MANUAL PARTS LIST

# $\mathsf{MODELAS}\text{--}1080$



ALSO APPLICABLE TO MODEL AS-1080DB AND AS-1070



#### STEREO RECEIVER

# MODEL AS-1080

ALSO APPLICABLE TO MODEL AS-1080DB AND AS-1070

SECTION 1	SERVICE MANUAL	1
SECTION 2	PARTS LIST	29
SECTION 3	SCHEMATIC DIAGRAM	41

#### SECTION 1

#### **SERVICE MANUAL**

#### TABLE OF CONTENTS

I.	TECHNICAL DATA	2
Π.	DISMANTLING OF UNIT	6
III.	ARRANGEMENT OF PRINCIPAL PARTS	7
IV.	FM TUNER SECTION ADJUSTMENTS	8
	1. Model AS-1080 and AS-1080DB	9
	2. Model AS-1070	10
V.	AM TUNER SECTION ADJUSTMENTS	11
VI.	CD-4 ADJUSTMENTS	12
VII.	SQ ADJUSTMENTS	14
VIII.	DOLBY N.R. CIRCUIT ADJUSTMENTS	15
IX.	MAIN AMPLIFIER ADJUSTMENTS	16
X.	TUNING CORD THREADING	17
XI.	CLASSIFICATION OF VARIOUS P.C BOARDS	18
	1. P.C BOARD INTERCHANGEABILITY CHART	18
	2. COMPOSITION OF VARIOUS P.C BOARDS	19

For basic adjustments, measuring methods, and operating principles, refer to GENERAL OPERATING PRINCIPLES AND ADJUSTMENTS.

#### I. TECHNICAL DATA

#### MODEL AS-1080 and AS-1080DB

#### 1. AMPLIFIER SECTION

CONTINUOUS POWER OUTPUT				
4 CHANNE	LS DRIVEN	40 watts per channel, min. RMS, at 8 ohms from 20 to 20,000 Hz,		
		with no more than 0.2% total harmonic distortion.		
2 CHANNE	LS DRIVEN	80 watts per channel, min. RMS, at 8 ohms from 20 to 20,000 Hz		
		with no more than 0.2% total harmonic distortion.		
TOTAL HARMONIC DISTORTION	(1 kHz)	Less than 0.2%		
POWER BANDWIDTH (IHF)		10 to 60,000 Hz/8 ohms (Distortion within 0.2%)		
INPUT SENSITIVITY	PHONO	3 mV/47 k ohms (CD-4 1.5 mV/47 k ohms)		
	AUX	160 mV/47 k ohms		
	TAPE 1 & 2	160 mV/47 k ohms		
SIGNAL TO NOISE RATIO (IHF) PHONO		Better than 80 dB		
	AUX	Better than 90 dB		
CHANNEL SEPARATION (IHF)	PHONO	Better than 50 dB (at 1,000 Hz)		
EQUALIZER		RIAA ±1 dB (Phono)		
TONE CONTROL	BASS	±10dB at 100 Hz		
	TREBLE	±10 dB at 10 kHz		
LOUDNESS CONTROL		+9 dB at 100 Hz, +4 dB at 10 kHz (Volume Control at -30 dB position)		
FILTER	HIGH	-6 dB at 10 kHz		
	LOW	-10 dB at 50 Hz		
DOLBY SYSTEM		Dolby "B" Processor (AS-1080DB only)		
DOLBY TONE		400 Hz/Rec Out, Pin 150 mV (AS-1080DB only)		

#### 2. FM TUNER SECTION

FREQUENCY RANGE		88 to 108 MHz
SENSITIVITY (IHF)		1.9 μV
CUPTURE RATIO (IHF)		1.0 dB
SELECTIVITY (IHF)		Better than 70 dB at 98 MHz
SIGNAL TO NOISE RATIO		Better than 70 dB
IMAGE REJECTION		Better than 75 dB at 98 MHz
IF REJECTION		Better than 90 dB at 98 MHz
SPURIOUS REJECTION		Better than 80 dB at 98 MHz
HARMONIC DISTORTION MONA	AURAL	Less than 0.2%
S	TEREO	Less than 0.4%
FM STEREO SEPARATION		Better than 40 dB (1,000 Hz)
FM MUTING		Variable (3 to 300 μV/ON-OFF)
ANTENNA INPUT IMPEDANCE		300 ohms balanced, 75 ohms unbalanced

#### 3. AM TUNER SECTION

FREQUENCY RANGE	535 to 1,605 kHz		
SENSITIVITY (IHF)	200 μV/m (Bar Antenna), 5 μV (EXT Antenna)		
IMAGE REJECTION	Better than 55 dB at 1,000 kHz		
IF REJECTION	Better than 45 dB at 1,000 kHz		
SELECTIVITY (IHF)	Better than 30 dB at 1,000 kHz		
AM DISTORTION	Less than 0.6%		
SIGNAL TO NOISE RATIO	Better than 50 dB		

#### 4. OTHER

TRANSISTOR	2SA640 (E) (F) 6 (6) 2SA640-1 (E) (F) (G) (H) 8 (8)
	2SA733 (P) (Q) (R) 4 (4) 2SC458LG (B) (C) 4 (4)
	2SC930 (E) (F) 2 (2) 2SC945L (K) (P) (Q) (R) 27 (29)
	2SC1000 (GR) (BL) 6 (6) 2SC1222 (E) (F) 10 (10)
	2SC1384 (P) (Q) 1 (1) 2SC1520-3 (K) (L) 4 (4)
	2SC1628 (O) (Y) 8 (8) 2SD313 (E) (F) 2 (2)
	2SB548 (P) (Q) 1 (1)
DIODE	1S188
DIODE	182472
	1S2473F
	10D1 4 (4) 10D2
	S5188 1 (1) WZ120
	WZ130 2 (2) WZ162 3 (3)
	IT243M47 3 (3) SEL105RC 4 (4)
	SEL305GC 0 (1) VD1221
IC	CX-049
ic .	CX-718
	TA7129P
	LA3550 1 (1) μPC30C 1 (1)
	NE545B
POWER REQUIREMENT	CSA, UL and LA Models: 120V, 60 Hz only
FOWER REQUIREMENT	CEE Models: 220V, 50 Hz only
	Other Models: 110/220/240V (Switchable)
DIMENSIONS	520 (W) × 182 (H) × 409 (D) mm
DIMENSIONS	$20.5 \text{ (W)} \times 7.2 \text{ (H)} \times 16.1 \text{ (D)} \text{ inches}$
WEIGHT	19.0 kg (41.8 lbs) Model AS-1080
WEIGHT	19.0 kg (41.8 lbs) Model AS-1080 19.3 kg (42 5 lbs) Model AS-1080DB
	17.3 Kg (42 3 103) MOUGH AG-1000DB

NOTES: 1. The numbers shown in parentheses (Transistor, Diode and IC) are applicable to Model AS-1080DB.

2. For improvement purposes, specifications and design are subject to change without notice.

Noise reduction circuit made under license from Dolby Laboratories Inc.
 The word 'DOLBY' and the Double-D symbol are trademarks of Dolby Laboratories Inc.

#### MODEL AS-1070

#### 1. AMPLIFIER SECTION

CONTINUOUS POWER OUTPUT				
4 CHANNI	ELS DRIVEN	25 watts per channel, min. RMS, at 8 ohms from 20 to 20,000 Hz,		
		with no more than 0.3% total harmonic distortion.		
2 CHANNE	ELS DRIVEN	50 watts per channel, min. RMS, at 8 ohms from 20 to 20,000 Hz		
		with no more than 0.3% total harmonic distortion.		
POWER BANDWIDTH (IHF)		10 to 60,000 Hz/8 ohms (Distortion within 0.3%)		
INPUT SENSITIVITY	PHONO	3 mV/47 k ohms (CD-4 1.5 mV/47 k ohms)		
	AUX	160 mV/47 k ohms		
	TAPE 1 & 2	160 mV/47 k ohms		
SIGNAL TO NOISE RATIO (IHF) PHONO		Better than 80 dB		
	AUX	Better than 90 dB		
CHANNEL SEPARATION (IHF)	PHONO	Better than 50 dB (at 1,000 Hz)		
EQUALIZER		RIAA ±1 dB (Phono)		
TONE CONTROL	BASS	±10 dB at 100 Hz		
	TREBLE	±10 dB at 10 kHz		
LOUDNESS CONTROL		+9 dB at 100 Hz, +4 dB at 10 kHz (Volume Control at -30 dB position)		
FILTER	HIGH	−6 dB at 10 kHz		
	LOW	-10 dB at 50 Hz		

#### 2. FM TUNER SECTION

88 to 108 MHz
1.9 μV
1.0 dB
Better than 70 dB at 98 MHz
Better than 70 dB
Better than 65 dB at 98 MHz
Better than 80 dB at 98 MHz
Better than 70 dB at 98 MHz
Less than 0.2%
Less than 0.4%
Better than 40 dB (1,000 Hz)
Variable (3 to 300 μV/ON-OFF)
300 ohms balanced, 75 ohms unbalanced

#### 3. AM TUNER SECTION

FREQUENCY RANGE	535 to 1,605 kHz	
SENSITIVITY (IHF)	200 μV/m (Bar Antenna) 5μV (EXT Antenna)	
IMAGE REJECTION	Better than 55 dB at 1,000 kHz	
IF REJECTION	Better than 45 dB at 1,000 kHz	
SELECTIVITY (IHF)	Better than 30 dB at 1,000 kHz	
AM DISTORTION	Less than 0.6%	
SIGNAL TO NOISE RATIO	Better than 50 dB	

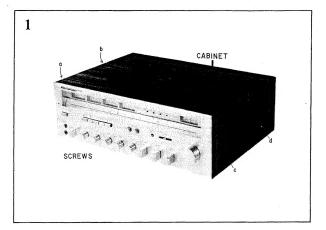
#### 4. OTHER

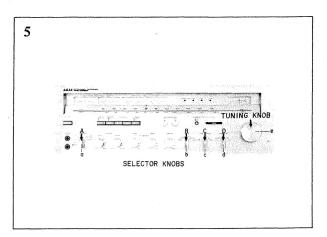
TDANGICTOD	2CA (40 (E) (E)	2SA640-1 (E) (F) (G) (H)8	
TRANSISTOR	2SA640 (E) (F) 6		
	2SA733 (P) (Q) (R) 4	2SC458LG (B) (C) 4	
	2SC930 (E) (F) 2	2SC945L (K) (P) (Q) (R) 23	
	2SC1000 (GR) (BL) 6	2SC1222 (E) (F)10	
	2SC1384 (P) (Q) 1	2SC1520-3 (K) (L)4	
	2SC1628 (P) (Y) 4	2SD313 (E) (F) 2	
	2SB548 (P) (Q) 1		
DIODE	1S188AM 2	1824729	
	1S2473 2	1S2473VE 10	
	10D1 4	10D2 3	
	HIFI SPECIAL 400V 3A . 4		
	WZ1201	WZ1302	
	WZ1623	IT243M47 3	
	SEL105RC 3	VD12214	
IC	CX-049 1	CX-050 1	
	CX-718 1	CD4-392	
	TA7129P2	LA1230 1	
	LA33501	$\mu$ PC30C 1	
	S-40W 4		
POWER REQUIREMENT	CSA, UL and LA Models: 120V, 60 Hz only		
	CEE Models: 220V 50 Hz only		
	Other Models: 110/220/240V (Switchable)		
DIMENSIONS	520 (W) × 182 (H) × 409 (D) mm		
	$20.5 \text{ (W)} \times 7.2 \text{ (H)} \times 16.1 \text{ (D)}$ inches		
WEIGHT	17.6 kg (38.7 lbs)		

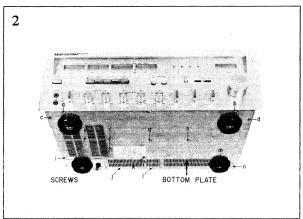
NOTE: For improvement purposes, specifications and design are subject to change without notice.

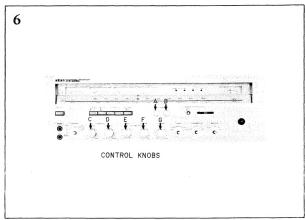
#### II. DISMANTLING OF UNIT

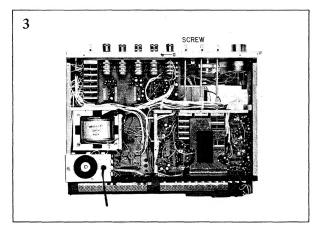
In case of trouble, etc. necessitating disassembly, please disassemble in the order shown in photographs. Reassemble in reverse order.

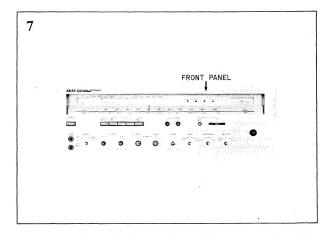


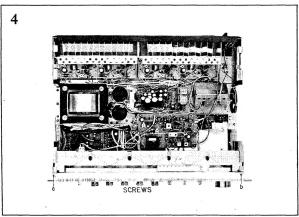


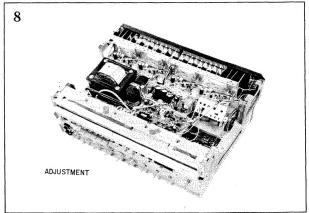












### III. ARRANGEMENT OF PRINCIPAL PARTS

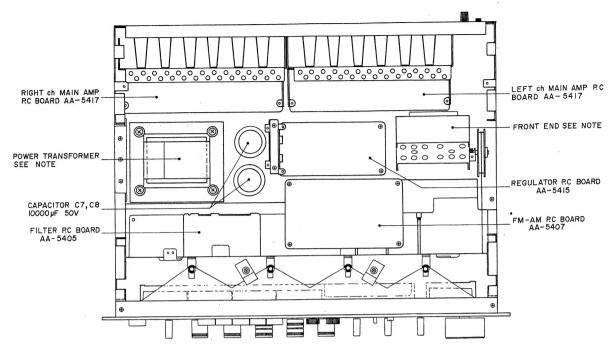


Fig. 1 Top View

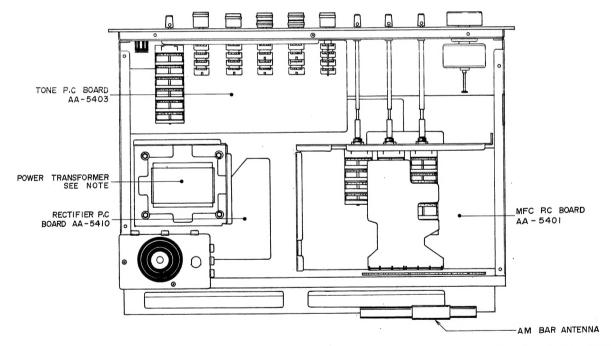


Fig. 2 Bottom View

#### NOTE

Model	Power Trans	Front End
AS-1080	AA-1080T-5	FL329U
AS-1080DB	AA-1080T-5	FL329U
AS-1070	AA-1070T-5	FB112U21

#### IV. FM TUNER SECTION ADJUSTMENTS

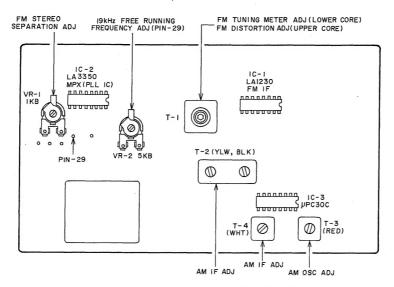


Fig. 3 IF P.C Board AA-5407

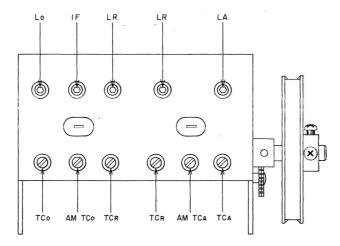


Fig. 4 Front End AS-1080/DB

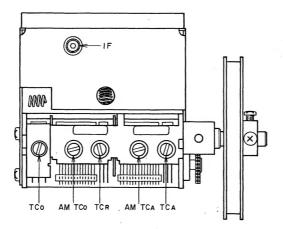


Fig. 5 Front End AS-1070

#### 1. Model AS-1080 and AS-1080DB

Step	Adjustment Item	Adjustment Point	Result	Remarks
1	Front End IF coil adjustment	IF coil (Front End)	Maximum noise level	Selector to "FM" Tune only noise without interference of broadcasting.
2 ·	Tuning Meter Centering	T-1 Lower side core (IF P.C Board)	Center indication of Tuning Meter	Same as above
3	Distortion factor adjustment	T-1 Upper side core (IF P.C Board)	Less than 0.5% distortion factor	108 MHz, 60 dB (mono) input. Less than 0.5% on both channels.
4	Confirmation of Tuning Meter indication			If Tuning Meter indication is not at center position, re-adjust STEPS 2 and 3 above.
5	Frequency Coverage adjustment	TCo (high range) Lo (low range) (Front End)	error: within ±250 kHz	108 MHz, 60 dB (mono) input.
6	Sensitivity adjustment	TCR, TCA (high range) LR, LA (low range) (Front End)	Less than 3% distortion factor	108 MHz, Less than 10 dB (mono) input.
7	PLL IC Free Running Frequency adjustment	VR-2 5 kB (IF P.C Board)	19.00 kHz	Mute Switch to "ON". Frequency Counter to PIN-29 (IF P.C Board). See NOTE-2.
8	Stereo Indicator Lighting confirmation		·	98 MHz, 60 dB (stereo) input. Failure of stereo indicator to light means that stereo broadcasts are not being received.
9	Stereo Separation adjustment	VR-1 1 kB (IF P.C Board)	More than 38 dB	98 MHz, 60 dB (stereo), L-ch input. Distortion factor must be Less than 0.7%
10	Stereo Separation adjustment		More than 38 dB	98 MHz, 60 dB (stereo), R-ch input. Distortion factor must be less than 0.7% and if it exceeds 0.7%, adjust the coil in STEP 1 within a half turn.
11	Confirmation of Tuning Meter indication		Tuning Meter: Center	

Chart-1

NOTE-1: In the event that the distortion factors in STEP 6 is not less than 3%, re-adjust Front End Trimmers TCR,

TCA, LR, LA to obtain an optimum distortion factor on the average of three points 88, 98 and 109 MHz.

NOTE-2: Free running frequency of the PLL IC must be an exact 19.00 kHz.

#### 2. Model AS-1070

Step	Adjustment Item	Adjustment Point	Result	Remarks
1	Front End IF coil adjustment	IF coil (Front End)	Maximum noise level	Selector to "FM". Tune only noise without interference of broadcasting.
2	Tuning Meter Centering	T-1 Lower side core (IF P.C Board)	Center indication of Tuning Meter	Same as above
3	Distortion factor adjustment	T-1 Upper side core (IF P.C Board)	Less than 0.5% distortion factor	108 MHz, 60 dB (mono) input. Less than 0.5% on both channels.
4	Confirmation of Tuning Meter Indication			If Tuning Meter indication is not at center position, re-adjust in STEPS 2 and 3 above.
5	Frequency Coverage adjustment	TCo (high range) (Front End)	error: within ±250 kHz	108 MHz, 60 dB (mono) input.
6	Sensitivity adjustment	TCR, TCA (high range) (Front End)	Less than 3% distortion factor	108 MHz, Less than 10 dB (mono) input.
7	PLL IC Free Running Frequency adjustment	VR-2 5 kB (IF P.C Board)	19.00 kHz	Mute Switch to "ON". Frequency Counter to PIN-29 (IF P.C Board). See NOTE-2.
8	Stereo Indicator Lighting confirmation			98 MHz, 60 dB (stereo) input. Failure of stereo indicator to light means that stereo broadcasts are not being received.
9	Stereo Separation adjustment	VR-1 1 kB (IF P.C Board)	More than 38 dB	98 MHz, 60 dB (stereo), R-ch input. Distortion factor must be less than 0.7%.
10	Stereo Separation adjustment		More than 38 dB	98 MHz, 60 dB (stereo), R-ch input. Distortion factor must be less than 0.7% and if it exceeds 0.7%, adjust the coil in STEP 1 within a half turn.
11	Confirmation of Tuning Meter indication		Tuning Meter: Center	

Chart-2

NOTE-1: In the event that the distortion factors in STEP 6 is not less than 3%, re-adjust Front End Trimmers TCR, TCA to obtain an average minimum distortion factor at 88, 98 and 108 MHz (same value at all three frequencies).

NOTE-2: Free running frequency of the PLL IC must be an exact 19.00 kHz.

#### V. AM TUNER SECTION ADJUSTMENTS

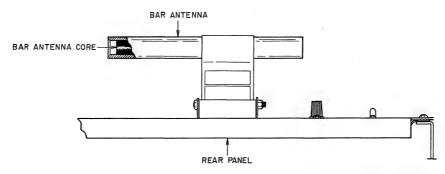


Fig. 6 Bar Antenna

Step	Adjustment Item	stment Item Adjustment Point		Remarks
1	Low Range Frequency Coverage adjustment  T-3 (RED) (IF P.C Board)		error: Less than 2%	520 kHz optional input.
2	Sensitivity adjustment	Bar Antenna core T-2 (YLW, BLK) T-4 (WHT) (IF P.C Board)	Maximum sensitivity	520 kHz optional input.
3	High Range Frequency Coverage adjustment	AM TCo (Front End)	error: Less than 2%	1,400 kHz optional input.
4	Sensitivity adjustment	AM TCA (Front End)	Maximum sensitivity	1,400 kHz optional input.

Chart-3

NOTE: Repeat procedures in STEPS 1 through 4 two or three times.

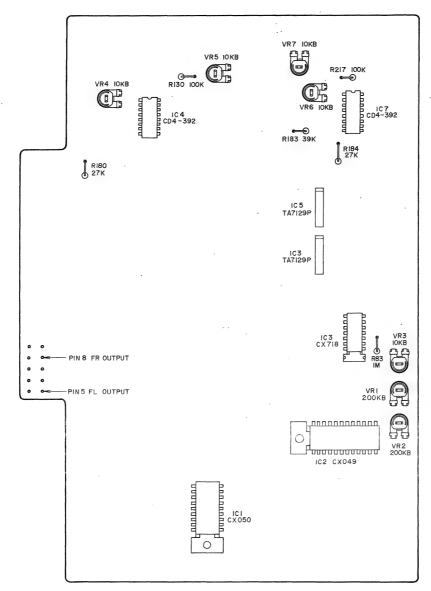


Fig. 7 MFC P.C Board AA-5401

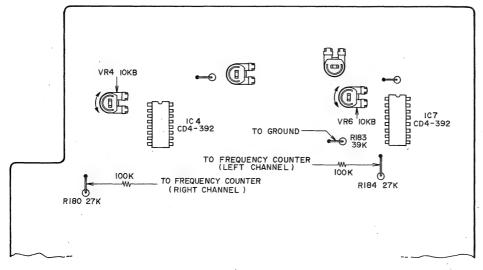


Fig. 8 VCO Adjustment (MFC P.C Board AA-5401)

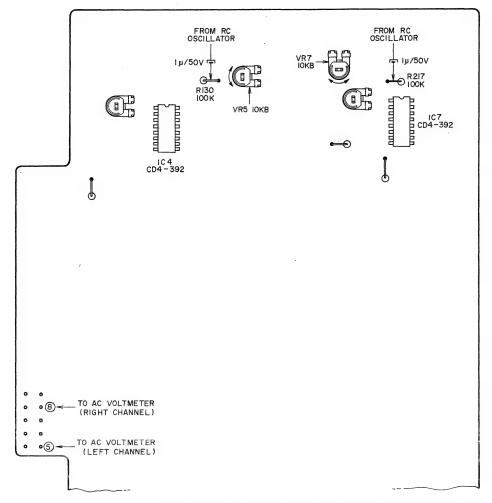


Fig. 9 ANRS Expander Adjustment (MFC P.C Board AA-5401)

# 1. Before adjustment, set switch positions as follows:

- 1) MODE switch to "DISC-4CH".
- 2) TAPE MONITOR switch to "SOURCE".
- 3) SELECTOR switch to "CD-4".

#### 2. VCO Adjustments (Refer to Fig. 8)

- 1) Short phono inputs.
- 2) Ground resistor R183 39 k ohms. (Mute off)
- 3) Connect a Frequency Counter to R184 27 k ohms (left channel) and R180 27 k ohms (right channel) through a 100 k ohms resistor.
- 4) Adjust semi-fixed resistors VR 6 10 kB (left channel) and VR4 10 kB (right channel) to obtain a 30 kHz ±100 Hz VCO oscillating frequency.

# 3. ANRS Expander Adjustments (Refer to Fig. 9)

- 1) Short phono inputs.
- 2) Connect an RC Oscillator to resistors R217 100 k ohms (left channel) and R130 100 k ohms (right channel) through a 1  $\mu$ /50V capacitor and supply a 1 kHz -30 dBm signal.
- 3) Connect an AC Voltmeter to Pin-5 (left channel) and Pin-8 (right channel).
- 4) Adjust semi-fixed resistors VR7 10 kB (left channel) and VR5 10 kB (right channel) to obtain a -36 dBm indication on the AC Voltmeter.

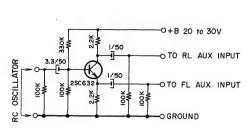


Fig. 10 Phase Invertor

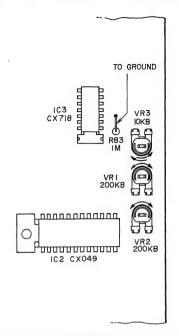


Fig. 11 SQ Adjustment (MFC P.C Board AA-5401)

# 1. Before adjustment, set switch positions as follows:

- 1) MODE switch to "SQ LOGIC".
- 2) TAPE MONITOR switch to "SOURCE".
- 3) SELECTOR switch to "AUX".

#### 2. Adjustments (Refer to Fig. 10 and Fig. 11)

- 1) Ground resistor R83 1M ohms (Pin (3) of IC3 CX-718).
- As shown in Fig. 10, supply a 1 kHz -15 dBm signal through a Phase Invertor to AUX FL channel.
- 3) Connect an AC Voltmeter to Tape 2 FL and RL channel Rec terminals.

- 4) Turn semi-fixed resistor VR3 10 kB fully counterclockwise. Then adjust output by turning VR3 clockwise to the point at which a 3 dB lower output than at fully counter-clockwise position is attained.
- 5) Disconnect resistor R83 1M ohms from ground.
- Adjust semi-fixed resistor VR2 200 kB to obtain a 15 dB decrease in RL channel output as compared to FL channel output.
- 7) Supply output signal from Phase Invertor shown in Fig. 10 to AUX FL and RL channels respectively.
- 8) Adjust semi-fixed resistor VR1 200 kB to obtain a 13.5 dB decrease in FL channel output as compared to RL channel output.

#### VIII. DOLBY N.R. CIRCUIT ADJUSTMENTS

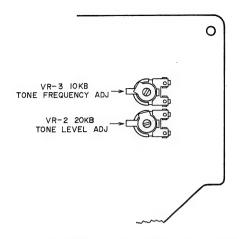


Fig. 12 Dolby N.R. P.C Board AA-5408

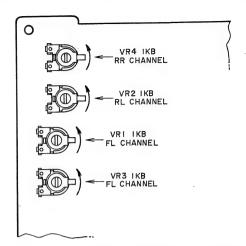


Fig. 13 Filter P.C Board A AA-5404

### 1. Before adjustment, set switch positions as follows:

- 1) MODE switch to "CAL TONE".
- 2) METER switch to "DOLBY LEVEL".

# 2. Dolby Tone Frequency Adjustment (Refer to Fig. 12)

Connect a Frequency Counter or Oscilloscope to the recording output terminal and adjust semi-fixed resistor VR3 10 kB to obtain a 400 Hz oscillation frequency.

# 3. Dolby Tone Level Adjustment (Refer to Fig. 12)

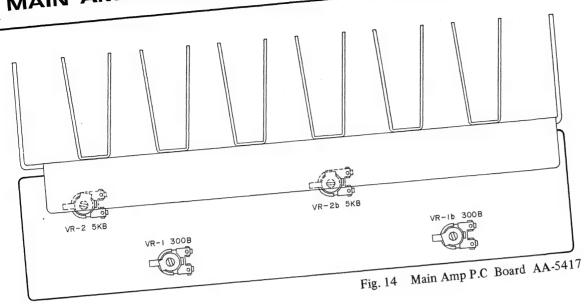
Adjust semi-fixed resistor VR2 20 kB to obtain a 150 mV on recording output terminal.

# 4. Level Meter Sensitivity Adjustment (Refer to Fig. 13)

Adjust semi-fixed resistors to obtaine a "0" VU indication of level meters respectively.

FRONT LEFT CHANNEL	VR1	1 kB
FRONT RIGHT CHANNEL	VR3	1 kB
REAR LEFT CHANNEL	VR2	1 kB
REAR RIGHT CHANNEL	VR4	1 kB

# IX. MAIN AMPLIFIER ADJUSTMENTS



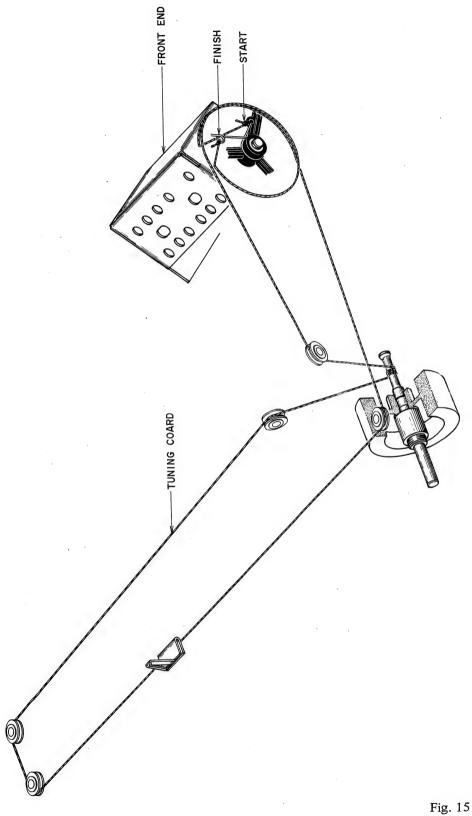
# 1. Idling Current Adjustment

- 1) Disconnect the lead wires of terminals (6), (30) of Main amplifier P.C Board from power supply.
- 2) Connect a 50 to 100 mA scale ammeter between power supply and the Main amplifier P.C Board
- 3) Adjust Main amplifier P.C Board semi-fixed resistors VR2 5 kB (left channel), and VR2b (right channel) to obtain 40 mA on both channels.

# 2. Zero Electrical Potential Adjustment

- 1) Set voltmeter or tester to 1.5V DC range and connect between terminals (3), (16) of Main amplifier P.C Board and chassis.
- 2) Adjust semi-fixed resistors VR1 300B (left channel), and VR1b 300B (right channel) to obtain a Zero voltmeter indication.

Model AS-1080 and AS-1080DB (Also applicable to Model AS-1070) Difference is only Front End



#### XI. CLASSIFICATION OF VARIOUS P.C BOARDS

#### 1. P.C BOARD INTERCHANGEABILITY CHART

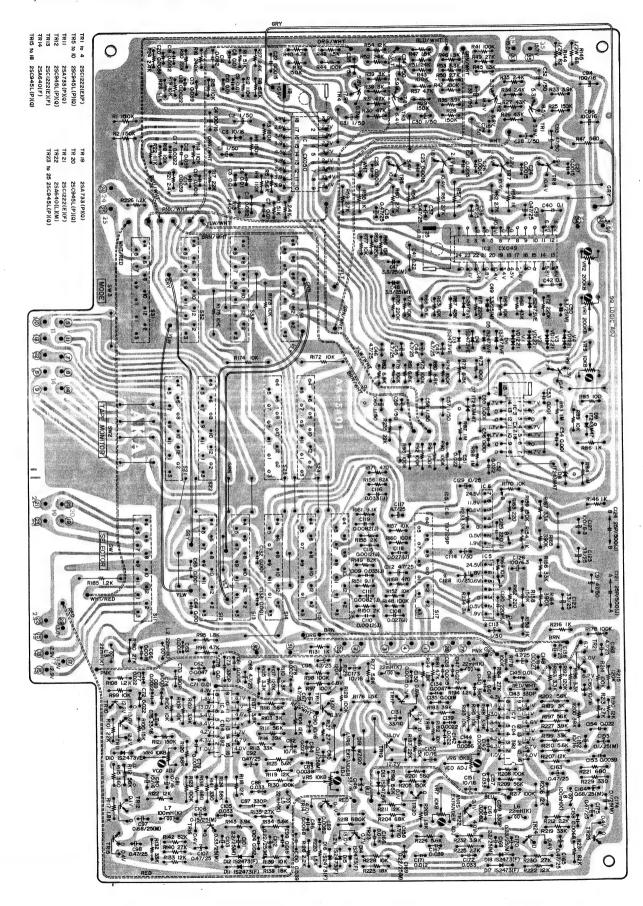
000101002
02
)3
06
17
07
15
10
13
07

Chart-4

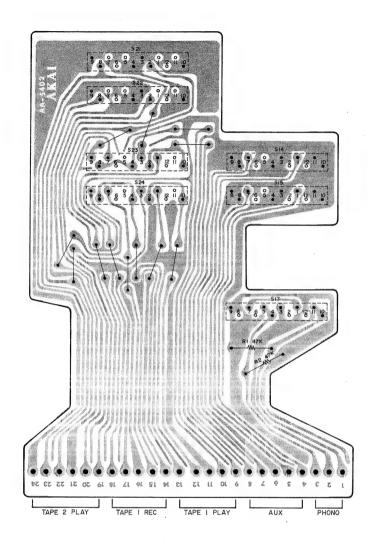
<sup>\*</sup> Mark indicates non-interchangeability

#### 2. COMPOSITION OF VARIOUS P.C BOARDS

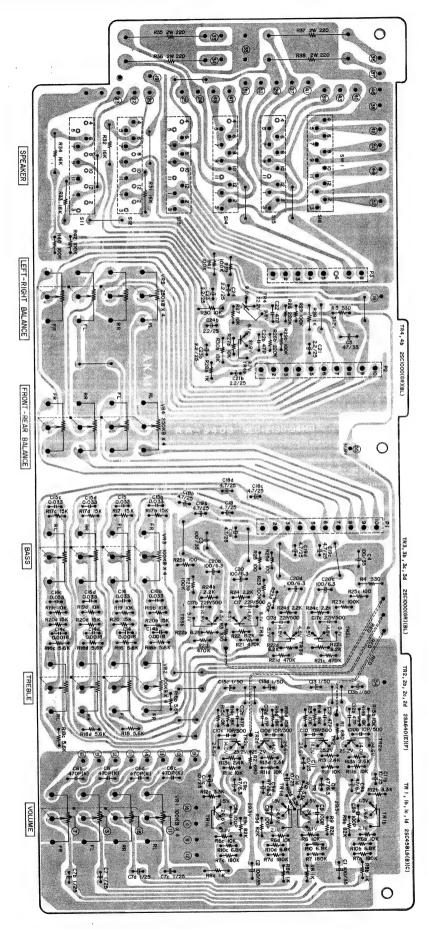
#### 1) MFC P.C BOARD AA-5401



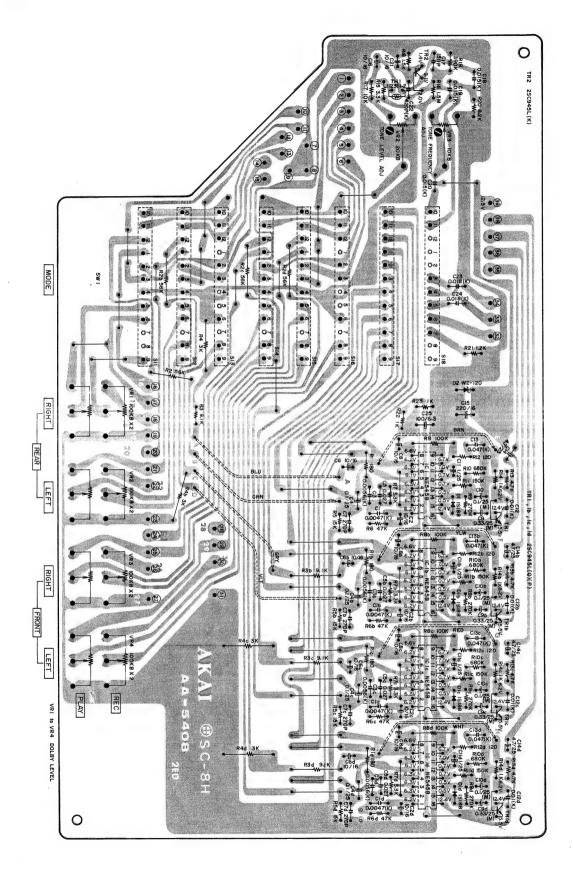
#### JACK P.C BOARD AA-5402



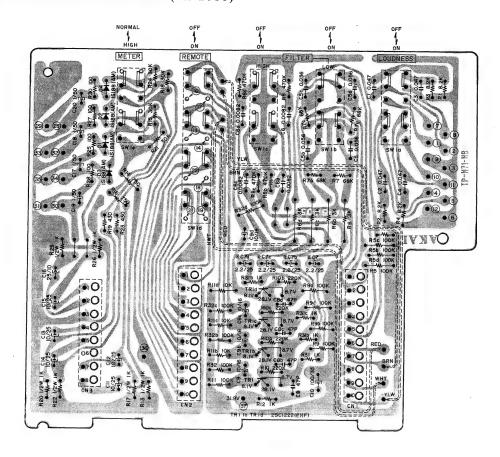
#### 2) TONE CONTROL P.C BOARD AA-5403



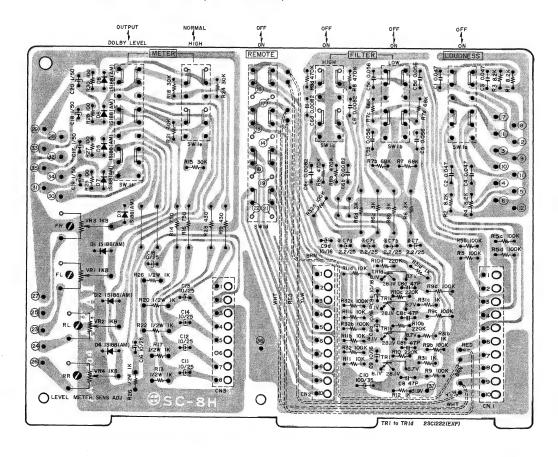
#### 3) DOLBY N.R. P.C BOARD AA-5408 (AS-1080DB)



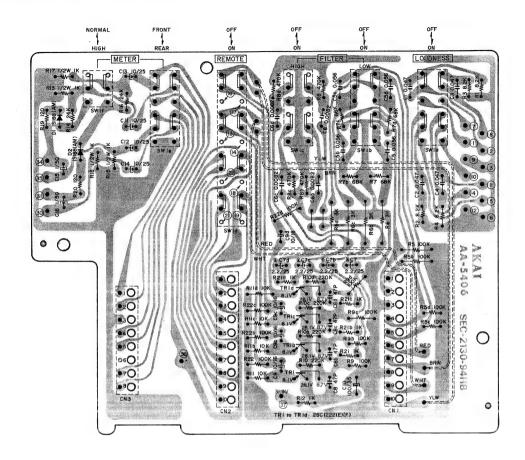
#### 4) FILTER P.C BOARD B AA-5405 (AS-1080)



FILTER P.C BOARD A AA-5404 (AS-1080DB)

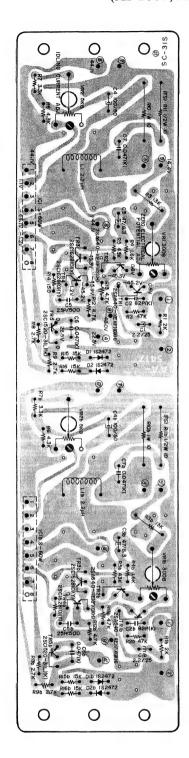


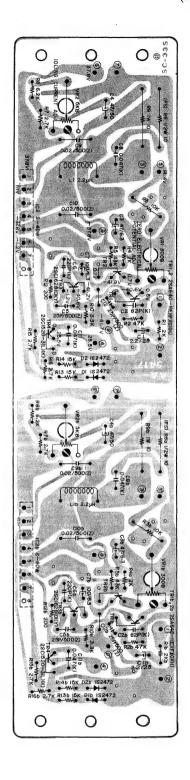
#### FILTER P.C BOARD C AA-5406 (AS-1070)



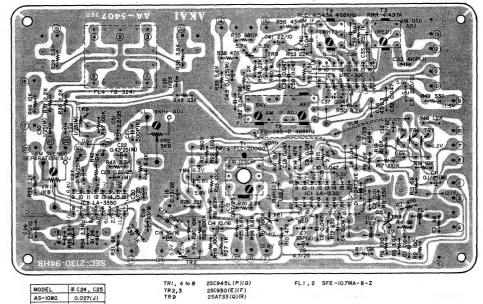
#### 5) MAIN AMPLIFIER P.C BOARD AA-5417 (AS-1080, AS-1080DB)

# 6) MAIN AMPLIFIER P.C BOARD AA-5417 (AS-1070)

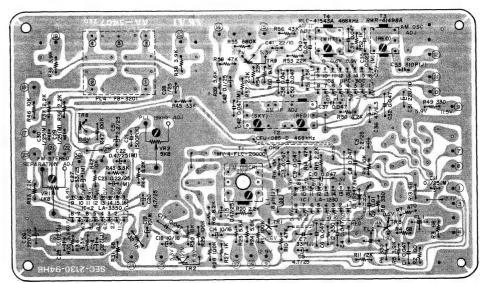




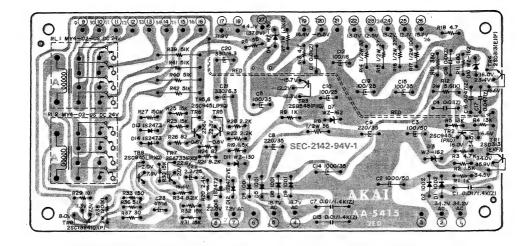
#### 7) IF P.C BOARD AA-5407 (AS-1080, AS-1080DB)



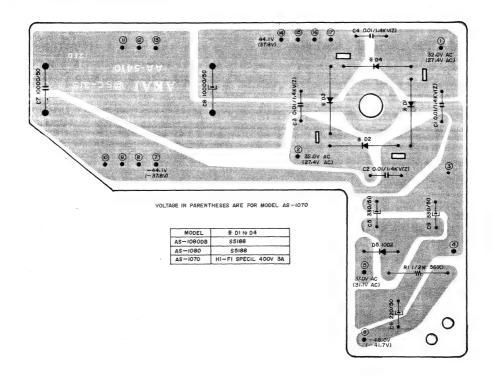
#### IF P.C BOARD AA-5407 (AS-1070)



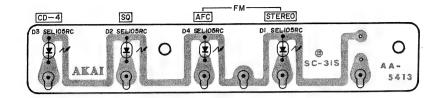
#### 8) REGULATOR P.C BOARD AA-5415



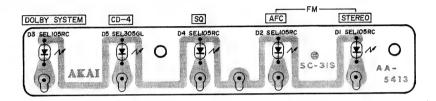
#### 9) RECTIFIER P.C BOARD AA-5410



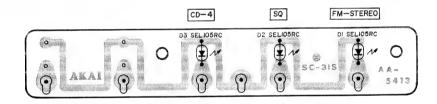
#### 10) LED P.C BOARD AA-5413 (AS-1080)



#### LED P.C BOARD AA-5413 (AS-1080DB)

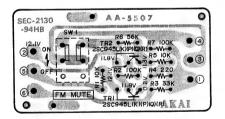


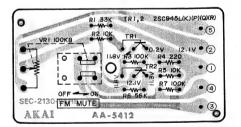
#### LED P.C BOARD AA-5413 (AS-1070)



#### 11) MUTE P.C BOARD AA-5507 (AS-1080, AS-1070)

12) MUTE P.C BOARD AA-5412 (AS-1080DB)





#### **SECTION 2**

# PARTS LIST

#### TABLE OF CONTENTS

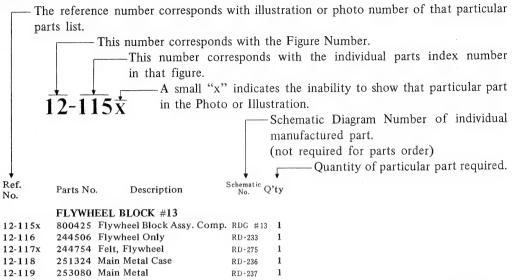
	BASIC PARTS LIST	31
1.	MULTI FUNCTION P.C BOARD (AA-5401) BLOCK	32
2.	TONE P.C BOARD (AA-5403) BLOCK	32
3.	DOLBY P.C BOARD (AA-5408) BLOCK	32
4.	FILTER P.C BOARD (AA-5404, 5405, 5406) BLOCK	32
5.	MAIN AMP P.C BOARD (AA-5417) BLOCK	33
6.	MAIN AMP P.C BOARD (AA-5417) BLOCK	33
7.	IF P.C BOARD (AA-5407) BLOCK	33
8.	REGULATOR P.C BOARD (AA-5415) BLOCK	33
9.	RECTIFIER P.C BOARD (AA-5410) BLOCK	33
0.	LED P.C BOARD (AA-5413) BLOCK	34
1.	MUTE P.C BOARD (AA-5507) BLOCK	34
2.		34
<b>3</b> .	ASSEMBLY BLOCK	34
l <b>4</b> .	FINAL ASSEMBLY BLOCK	37
١5.	LIST OF INTERCHANGEABLE SEMICONDUCTORS	38
ND	EX	40

Some of the parts in this parts list are only available as a complete assembly, and can not be supplied as individual parts.

Resistor and Capacitor which is not listed in this parts list, please refer to Common Parts List.

#### HOW TO USE THIS PARTS LIST

- 1. This parts list is compiled by various individual blocks based on assembly process.
- 2. When ordering parts, please describe parts number, serial number, and model number in detail.
- 3. How to read List



- 4. The symbol numbers shown on the P.C. Board list can be matched with the Composite Views of Components of the Schematic Diagram or Service Manual.
- 5. Please utilize separate "Common List for Service Parts" for Resistor Parts orders.
- 6. The shape of the parts and parts name, etc. can be confirmed by comparing them with the parts shown on the Electrical Parts Table of P.C. Board.
- 7. Both the kind of part and installation position can be determined by the Parts Number. To determine where a parts number is listed, utilize Parts Index at end of Parts List.
  - It is necessary first of all to find the Parts Number. This can be accomplished by using the Reference Number listed at right of parts number in the Parts Index. (meaning of ref. no. outlined in Item 3 above).
- 8. Utilize separate "Price List for Parts" to determine unit price. The most simple method of finding parts Price is to utilize the reference number.

#### BASIC PARTS LIST

Parts Nomenclature	Parts No.	Parts Nomenclature	Parts No.
MFC P.C Board Comp.	BA680815	Power Trans. AS-1080T-5	BT668248
Tone P.C Board Comp.	BA657742	Power Trans. AS-1070T-5	BT656550
Tone P.C Board Comp. (1070)	BA657731	Front End FL329U	TA656583
Dolby P.C Board Comp. (1080DB)	BA657663	Front End FB-112U-12 (1070)	TA562735
Filter P.C Board Comp.	BA657685	Slide Volume VJ-308-45N25D2 100K	EV656616
Filter P.C Board Comp. (1080DB)	BA657696	Flywheel Block Comp.	BF671038
Filter P.C Board Comp. (1070)	BA657674	Scale Plate	TA652623
Main Amp P.C Board Comp.	BA657876	Scale Plate B (1070)	TA665098
Main Amp P.C Board Comp. (1070)	BA657865	Pointer	TA652757
IF P.C Board Comp.	BA657764	Front Panel B	SP656425
IF P.C Board Comp. (1080DB)	BA657775	Front Panel A (1080DB)	SP656414
IF P.C Board Comp. (1070)	BA657753	Front Panel C (1070)	SP656436
Regulator P.C Board Comp.	BA680758	Front Glass	SZ652285
Rectifier P.C Board Comp.	BA680771	Bottom Plate	SP652331
Rectifier P.C Board Comp. (1070)	BA680760	Cabinet	BC652634
LED P.C Board Comp.	BA657628	Tuning Knob (Large)	SK647967
LED P.C Board Comp. (1080DB)	BA657630	Push Button (Square)	SB679860
LED P.C Board Comp. (1070)	BA657617	Single Knob	SK646817
Mute P.C Board Comp.	BA657707	Double Knob (Upper)	SK644670
Mute P.C Board Comp. (1080DB)	BA657720	Double Knob (Lower)	SK645208
Lamp, Lead Type 8V 190mA	EL668362	Selector Knob	SK646830
Rear Panel 1	BZ657887	Single Knob (Small)	SK647548
Bar Antenna	TA656313	4 Ch. Small Double Knob (Upper) (1080DB)	SK677057
Bar Antenna (1070)	TA656324	4 Ch. Small Double Knob (Lower) (1080DB)	SK677046
Level Meter T-85-1061	EM650902	I.C S-60W	EI656256
Tuning Meter T-85-1060	EM650226	I.C S-40W (1070)	EI656245

1.	<b>MULTI</b>	<b>FUNCTION</b>	P.C	<b>BOARD</b>	(AA-5401)
					<b>BLOCK</b>

		BLOCK	_
Symbol No.	Parts No.	Description Q'ty	y
1-1	BA657808	Multi Function P.C Board Comp. (AA-5401)	1
1-2	BA670522	Multi Function P.C Board Comp. (AA-5401) (CSA)	1
1-3	BA680815	Multi Function P.C Board	1
1-IC1	E1656976		1
1-IC2	E1656965	IC CX-049	1
1-IC3	E1656987	IC CX-718	1
1-IC4	E1656958	IC CD4-392	1
1-IC5,6	E1657000		2
1-IC7	E1656958		1
1-TR1to4	ET459810		4
1-TR5to10	ET639437		6
1-TR11	ET554657		1
1-TR12	ET639437		1
1-TR13	ET459810		1
1-TR13	ET665842		1
1-TR14	ET639437		4
1-TR13t018	ET554657		1
1-TR19	ET639437		1
1-TR20 1-TR21	ET459810		1
1-TR21 1-TR22	ET460912		1
1-TR22 1-TR23to25	ET430912 ET639437		3
1-1 K23t023	ED560913		6
1-D1106 1-D7to9	ED560913		3
			3 1
1-D10	ED560913		2
1-D11,12	ED657022		1
1-D13	ED560913		5
1-D14to18	ED657022		3 1
1-D19	ED510772		
1-L1,2	E0656943	* *	2
1-L3,4	E0656932	* *	2
1-L5,6	E0656943		2
1-L7,8	E0656954		2
1-VR1,2	EV465017	,	2
1-VR3to7	EV520806		5
1-V1to4	ED657033		4
1-SW1	ES657077		1
1-SW2	ES657088	-	1
1-SW3	ES657050		1
1-4	BA657810	Jack P.C Board Comp. (AA-5402)	
		Capacitor, Vertical Type	
1-C85	EC523282	,	1
1-C97	EC657055		1
1-C101	EC662126	Solid Aluminum 2.2µF(M) 25WV	1
1-C102	EC522167		1
1-C103	EC604440	Solid Aluminum 0.33µF(M) 25WV	1
1-C106	EC657066	Solid Aluminum 0.15 \mu F(M) 25WV	1
1-C140	EC516756	Styrol 390PF(K) 50WV	1
1-C155	EC523282	Solid Aluminum 0.1 µF(M) 25WV	1
1-C164	EC657055	Solid Aluminum 0.68 \( \mu \) F(M) 25WV	1
1-C168	EC662128	Solid Aluminum 2.2µF(M) 25WV	1
1-C169	EC522167	Solid Aluminum 0.22 \mu F(M) 25WV	1
1-C170	EC604440	Solid Aluminum 0.33 µF(M) 25WV	1
1-C174	EC657066	Solid Aluminum 0.15 µF(M) 25WV	1

#### 2. TONE P.C BOARD (AA-5403) BLOCK

Symbol No.	Parts No.	Description	Q'ty
2-1	BA657742	Tone P.C Board Comp.	
		(AA-5403) (1080/DB)	1
2-2	BA657731	Tone P.C Board Comp.	
		(AA-5403) (1070)	1
2-3	BA670511	Tone P.C Board Comp.	
		(AA-5403) (1080/DB) (CSA)	1
2-4	BA670500	Tone P.C Board Comp.	
		(AA-5403) (1070) (CSA)	1

Symbol No.	Parts No.	Description	Q'ty
2-TR1	ET234843	Transistor 2SC458LG (B) (C)	4
2-TR2	ET655615	Transistor 2SA640 (E) (F)	4
2-TR3,4	ET622181	Transistor 2SC1000 (BL) (GR)	6
2-SW1	ES656831	Rotary SW. SRA-6186	1
2-VR1	EV656842	Co-axial 4-throw/Vol. V24L5GPHN 3BM 100kx4	1
2-VR2,3	EV656876	2-axial 4-throw/Vol. V24L5GPHN 1 kB 100k×4	2
2-VR2,3	EV656864	Co-axial 4-throw/Vol. V24L5GPHN 1 kB 100k×4 (1070)	2
2-VR4,5	EV656853	Co-axial 4-throw/Vol. V24L5GPHN 1Z250k×4	2
2-P1,2	EJ656886	Connector Pin 10P 5095-10D	. 2
2-P3	EJ656897	Connector Pin 8P 5095-8D	. 1

#### 3. DOLBY P.C BOARD (AA-5408) BLOCK

Symbol No.	Parts No.	Description Q	'ty
3-1	BA657663	Dolby P.C Board Comp.	
		(AA-5408) (1080DB)	1
3-IC1	E1605013	IC NE545B	4
3-TR1	ET639437	Transistor 2SC945L (Q) (P)	4
3-TR2	ET658102	Transistor 2SC945L (K)	1
3-D1	ED562386	Germanium Diode 1S188AM	4
3-D2	ED510772	Zener Diode WL-120	1
3-SW1	ES658884	Rotary SW. SR26N 8-23-5 40S	1
3-VR1	EV658895	Double Vol. V24L5DPHN	
		100 kB×2	4
3-VR2	EV560136	Semi-fixed/Vol. V10K8-4-2 20 kB	1
3-VR3	EV604438	Semi-fixed/Vol. V10K8-4-2 10 kB	
3-TH1	ED485370	Thermister 112351-2	1
		Capacitor, Vertical Type	
3-C4	EC523282	Solid Aluminum 0.1 µF(M) 25WV	4
3-C9	EC604440	Solid Aluminum 0.33µF(M) 25WV	4
3-C10	EC523282	Solid Aluminum 0.1 µF(M) 25WV	4
3-C22	EC516767	Styrol 470PF (K) 50WV	1

#### 4. FILTER P.C BOARD (AA-5404, 5405, 5406) BLOCK

Symbol No.	Parts No.	Description	Q'ty
4-1	BA657685	Filter P.C Board Comp.	1
-		(AA-5405)	1
4-2	BA657696	Filter P.C Board Comp.	
		(AA-5404) (1080DB)	1
4-3	BA657674	Filter P.C Board Comp.	
		(AA-5406) (1070)	1
4-TR1	ET459810	Transistor 2SC1222 (E) (F)	4
4-SW1	ES656730	Push SW. 5FT-0001 FF6620	1
4-SW1	ES656741	Push SW. 6FT-0002FF6620	
		(1080DB)	1
4-SW1	ES656728	Push SW. 6FT-0001 FF6620	
		(1070)	1
4-D1to4	ED562386	Germanium Diode 1S188AM	4
4-D1to8	ED562386	Germanium Diode 1S188AM	
		(1080DB)	8
4-D1,2	ED562386	Germanium Diode 1S188AM	
		(1070)	2
4-VR1to4	EV484863	Semi-fixed/Vol. V10K8-4-2 1 k	В
		(metalized Film) (1080DB	3) 4
4-J1,2	EJ656785	Jack 10P 2145-10B	2
4-J3	EJ656796	Jack 8P 2145-8B	1

When ordering parts, Please describe Parts Number, Serial Number, and Model Number in detail.

5. MAIN AMP P.C BOARD (AA-5417) BLOCK			
Symbol No.	Parts No.	Description	Q'ty
5-1	BA657876	Main Amp P.C Board Comp.	
		(AA-5417) (1080/DB)	1
5-TR1,2	ET661836	Transistor 2SA640-1 (P) (Q)	4
5-TR3,4	ET623035	Transistor 2SC1628 (O) (Y)	4
5-TR5	ET656267	Transistor 2SC1520(3)	2
5-D1,2	ED656278	Silicon Diode 1S2472	4
5-VR1	EV604484	Semi-fixed/Vol. V10K8-4-2	
		B300 ohn	ıs 2
5-VR2	EV499364	Semi-fixed/Vol. V10K8-4-2 5 kB	2
5-L1	E0650823	Phase Equalizer Coil 2.2 µH (K)	2
5-R10	ER658124	Metal Oxide Film/R. 1W	
		10 ohms (J)	2

Symbol No.	Parts No.	Description Q't	ţy
7-L1	E0560610	Inductor 144LZ 18µH (J)	1
7-VR1	EV484863	Semi-fixed/Vol. V10K8-4-2 1 kB	
		(Metalized Film)	1
7-VR2	EV499364	Semi-fixed/Vol. V10K8-4-2 5 kB	1
		Capacitor, Vertical Type	
7-C11	EC523282	Solid Aluminum 0.1µF(M) 25WV	1
7-C16	EC604440	Solid Aluminum 0.33µF(M) 25WV	1
7-C21	EC666483	Styrol 1500PF(K) 50WV	1
7-C22	EC621257	Solid Aluminum 0.47µF(M) 25WV	1
7-C23	EC522167	Solid Aluminum 0.22µF(M) 25WV	1
7-C27	EC604440	Solid Aluminum 0.33µF(M) 25WV	1
7-C29,30	EC522516	Tantalum 1µF(M) 25WV (DTS	
		Type)	2
7-C33	EC658001	Styrol 410PF(J) 50WV (1080/DB)	1
7-C33	EC650406	Styrol 310PF(J) 50WV (1070)	1
7-C43	EC523282	Solid Aluminum 0.1µF(M) 25WV	1

#### 6. MAIN AMP P.C BOARD (AA-5417) BLOCK

Symbol No.	Parts No.	Description	Q'ty
6-1	BA657865	Main Amp P.C Board Comp	
		(AA-5417) (1070)	1
6-TR1,2	ET661836	Transistor 2SA640-1 (P) (Q)	4
6-TR3	ET623035	Transistor 2SC1628 (O) (Y)	2
6-TR4	ET656267	Transistor 2SC1520-3 (L) (K)	2
6-D1,2	ED656278	Silicon Diode 1S2472	4
6-VR1	EV604484	Semi-fixed/Vol. V10K8-4-2	
		300 ohms (B)	2
6-VR2	EV499364	Semi-fixed/Vol. V10K8-4-2 5 kB	2
6-L1	ED650823	Phase Equalizer Coil 2.2 µH (K)	2
6-R6	ER658124	Metal Oxide Film/R. 1W 10	
		ohms (J)	2

#### 7. IF P.C BOARD (AA-5407) BLOCK

7. If T.C BOARD (AA-3407) BLOCK				
Symbol No.	Parts No.	Description	Q'ty	
7-1	BA657764	IF P.C Board Comp. (AA-5407)	1	
7-2	BA657775	IF P.C Board Comp. (AA-5407)		
		(1080DB)	1	
7-3	BA657753	IF P.C Board Comp. (AA-5407)		
		(1070)	1	
7-IC1	E1650586	IC LA-1230	1	
7-IC2	E1650597	IC LA-3350A	1	
7-IC3	E1650362	IC MPC-30C	1	
7-TR1	ET639437	Transistor 2SC945L (Q) (P)	1	
7-TR2,3	ET618873	Transistor 2SC930 (E) (F)	2	
7-TR4to8	ET639437	Transistor 2SC945L (Q) (P)		
		(1080/DB)	5	
7-TR8	ET639437	Transistor 2SC945L (Q) (P)		
		(1070)	1	
7-TR9	ET557965	Transistor 2SA733 (Q) (R)	1	
7-D1	ED560913	Silicon Diode 1S2473VE	1	
7-T1	E0650608	Discri Coil MV4-FLC-20000	1	
7-T2	E0650384	AM-IF Trans. CFU-085-D		
		468 kHz	1	
7-T3	E0645838	OSC. Coil RWR41497A		
		(1080/DB)	1	
7-T3	E0650395	OSC. Coil RWR41498A (1070)	1	
7-T4	E0650373	AM-IF Trans. RLC-41543A		
		468 kHz	1	
7-FL1to3	ER650430	Ceramic Filter SFE-10.7 MA-8-7	Z.	
		(1080/DB)	3	
7-FL1,2	ER650430	Ceramic Filter SFE-10.7MA-8-Z		
		(1070)	2	
7-FL4	ER656908	Block Filter FB3201	1	

#### 8. REGULATOR P.C BOARD (AA-5415) BLOCK

Symbol No.	Parts No.	Description	Q'ty
8-1	BA680758	Regulator P.C Board Comp.	
-		(AA-5415)	1
8-TR1	ET452531	Transistor 2SD313 (E) (F)	1
8-TR2	ET639437	Transistor 2SC945L (Q) (P)	1
8-TR3	ET656910	Transistor 2SB548 (P) (Q)	1
8-TR4	ET452531	Transistor 2SD313 (E) (F)	1
8-TR5,6	ET639437	Transistor 2SC945L (Q) (P)	2
8-TR7	ET554657	Transistor 2SA733 (P) (Q)	1
8-TR8	ET639437	Transistor 2SC945L (Q) (P)	1
8-TR9	ET658067	Transistor 2SC1384 (Q) (P)	1
8-D1,2	ED224548	Silicon Diode 10D2	2
8-D3	ED494627	Zener Diode WZ162	1
8-D4	ED539976	Zener Diode WZ-130	1
8-D5,6	ED224526	Silicon Diode 10D1	2
8-D7	ED494627	Zener Diode WZ-162	1
8-D8,9	ED224526	Silicon Diode 10D1	2
8-D10	ED494627	Zener Diode WZ-162	2
8-D11	ED539976	Zener Diode WZ-130	1.
8-D12to14	ED560913	Silidon Diode 1S2473VE	3
8-D15	ED656278	Silicon Diode 1S2472	1
8-RL1,2	EP638763	Relay MY4-02-US DC24V	2
8-2	ZW632226	Insulater Washer Bush M	2
8-3	ZS379350	Screw, pan head 3×6	2
8-4	ZS447840	Trapping Screw #2 3×8 (BR)	2
8-R12	ER656921	Metal Oxide Film/R. 2W	
		5.6 ohms (K)	1
8-R38	ER658091	Metal Oxide Film/R. 2W	
		120 ohms (K)	1

#### 9. RECTIFIER P.C BOARD (AA-5410) BLOCK

Symbol No.	Parts No.	Description	Q'ty
9-1	BA680771	Rectifier P.C Board Comp.	
		(AA-5410)	1
9-2	BA680760	Rectifier P.C Board Comp.	
		(AA-5410) (1070)	1
9-D1to4	ED656234	Silicon Diode S5188	1
9-D1 to4	ED558033	Silicon Diode HIFI SPECIAL	
		400V 3A (1070)	4
9-D5	ED224548	Silicon Diode 10D2	1

#### 10. LED P.C BOARD (AA-5413) BLOCK

Symbol No.	Parts No.	Description	Q'ty
10-1	BA657628	LED P.C Board Comp.	
		(AA-5413)	1
10-2	BA657630	LED P.C Board Comp. (AA-5413	)
		(1080DB)	1
10-3	BA657617	LED P.C Board Comp. (AA-5413	)
		(1070)	1
10-D1to4	ED694091	Luminous Diode SEL-105RC	
		(1080/DB)	4
10-D1	ED694091	Luminous Diode SEL-105RC	
		(1070)	- 1
10-D3,4	ED694091	Luminous Diode SEL-105RC	
		(1070)	2
10-4	TA652678	Lamp Retainer (AA-5485)	1
10-5	ZS325495	Tapping Screw #2 3×6 (BR)	2

#### 11. MUTE P.C BOARD (AA-5507) BLOCK

Symbol No.	Parts No.	D Description C	)'ty
11-1 11-TR1,2	BA657707 ET635218	Mute P.C Board Comp. (AA-5507 Transistor 2SC945L (K) (P) (Q)	) 1
11-SW1	ES656820	Push SW. SPG202C (R)	2

#### 12. MUTE P.C BOARD (AA-5412) BLOCK

Symbol No.	Parts No.	Description	Q'ty
12-1	BA657720	Mute P.C Board Comp. (AA-5412	2)
12-TR1,2	ET635218	(1080DB) Transistor 2SC945L (K) (P) (Q)	1
12-VR1	EV656818	(P) Vol. V16L4PHS 100 kB	1

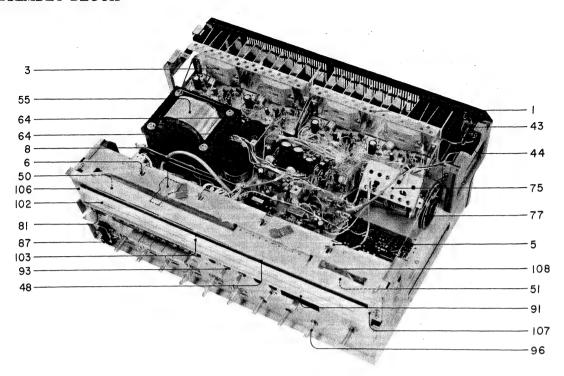
#### 13) ASSEMBLY BLOCK

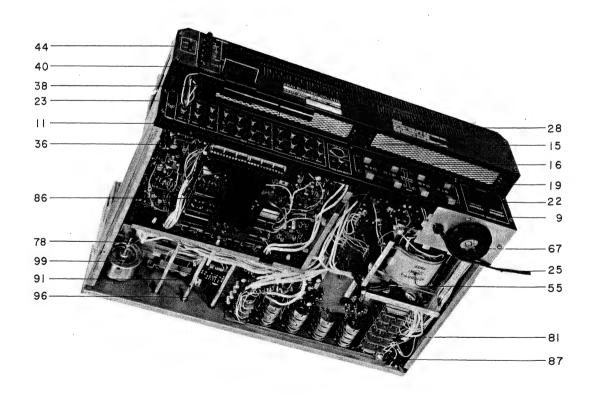
13) A	SSEMBL	Y BLOCK		
Ref. No.	Parts No.	Description	Schematic No.	Q'ty
	MAIN AMP	BLOCK		
13-1	EZ652162	Heat-sink	AA-5472	1
13-2x	EI656245	IC S-40W (1070)	45-8-157	4
13-3	EI656256	IC S-60W	45-8-158	4
13-4x	ZW379394	ISO Screw, round head 3×8		4
		TION BLOCK	AA-5418	
13-5	EZ652454	Lamp P.C Board	AA-5416	1
13-6	EL668362	Pilot Lamp 8V 190MA (Lead Type)	28-2-50	4
13-7x	MB650147	Rubber Bushing No. 6552	3-13-44	4
	REAR PAN	EL BLOCK		
13-8	EA652476	Remote P.C Board	AA-5411	1
13-9	SP656447	Rear Panel 1	AA-5469	1
13-10x	SP665998	Rear Panel 2 (CEE)	AA-5469	1
13-11	EJ656280	Pin Jack Plate	31-1-152	1
13-12x	EA652803	Pin Jack P.C Board	AA-5409	1
13-13x	EJ656291	Connector Pin 12P 2461-12B	42-1-92	2
13-14x	ZS366120	Screw, round head 3x6		6
13-15	MZ665032	8P Cable Connector	51-1-129	1
13-16	EJ354936	Pin Jack 1P	31-1-32	1
13-17x	ZS447761	Tapping Screw #2 3×6 (BR) (Black)		2
13-18x	ZS393794	Screw, round head 3×8		2
13-19	EJ655683	4P Speaker Jack C	32-1-68	4
13-20x	ZS393794	Screw, round head 3×8		8
13-21x		Nut M3		8
13-22	EJ650261	AC Consent U/L S-16432	31-1-147	2
13-23	SK652397	Knob 0512-2	34-1-4	1
13-24x		Washer D3.2×10×1t		1
13-25	EW374894	AC Cord CUL 3M	26-3-19	1
13-26x		AC Cord VM-0065 (CEE)	26-3-28	1
	HEAT-SINK	COVER BLOCK		
13-27x		Heat-sink Cover (1070)	AA-5476	1
13-28	EZ654941	Heat-sink Cover B	AA-5476	1
	EZ654952	Heat-sink Cover C (1080DB)		1
13-30x	EZ669150	Heat-sink Cover A-1 (1070) (CSA)	AA-5476	1
13-31 x	MZ669172	Heat-sink Cover B-1 (1080) (CSA)	AA-5476	1
13-32x	MZ669194	Heat-sink Cover C-1 (1080DB) (CSA)	AA-5476	1
13-33x	MZ669161	Heat-sink Cover A-2 (1070) (CEE)	AA-5476	1
13-34x	MZ669183	Heat-sink Cover B-2 (1080) (CEE)	AA-5476	1
13-35x	MZ669205	Heat-sink Cover C-2 (1080DB) (CEE)	AA-5476	1
13-36	TA656313	Bar Antenna	55-1-29	1
13-37x		Bar Antenna (1070)	55-1-27	1
13-38	TA530910	Antenna Channel	91-5029	1
	ZS447761	Tapping Screw #2 3×6 (BR) (Black)		2
13-40	EZ655187	5P Antenna Terminal Plate	32-1-69	1
13-40 13-41x		Screw, round head 3×8		4
	ZW273756	Nut M3		3
13-43	BT444137	Balum Trans. 75 ohms- 300 ohms	23-1-129	1
13-44	ES656335	Slide SW. SSB02210	25-3-117	
13-44 13-45x		Tapping Screw #2 3x8 (BR)		4
13-45x		Heat-sink Ventilater	AA-5480	
		ATE BLOCK		
13-47x		Meter Panel A (1080DB)	AA-5446	
13-48	SP656392	Meter Panel B	AA-5446	
13-49x		Meter Panel C (1070)	AA-5446	
13-50	EM650902		46-1-102	
13-51	EM650226	Tuning Meter 85C225	46-1-103	3 1
	ASSEMBLY		01 5000	
	MR530651		91-5008	
13-53			91-5010	4
13-54				4 9 1
13-55	BT668248	Power Trans. AS-1080T-5	38-4-39	, 1

Ref. No.	Parts No.	Description	Schematic No.	Q'ty
13-56x	BT656550	Power Trans. AS-1070T-5		
13-57x	BT669216	(1070) Power Trans. 1070T-2	38-4-385 38-4-402	1
13-58x	BT663478	(1070) (CSA) Power Trans. AS-1080T-2 (1080/DB) (CSA)	38-4-398	1
13-59x	BT691018	Power Trans. AS-1080T-3 (1080/DB) (CEE)	. 38-4-414	1
13-60x	BT674526	Power Trans. AS-1070T-3 (1070) (CEE)	38-4-410	1
13-61x	ZW462688	Washer D5.1×11.5×1t		4
13-62x	ZW274026	Spring Washer M5		4
13-63x 13-64	ZW413278 EC656561	Nut M5 Elect./C. 10000μF 50WV		4
13-04	LC030301	(Lug Type)	24-10-104	2
13-65x	ZS325495	Tapping Screw #2 3x6 (BR)		4
13-66x	ZS593201	Screw, pan head 3×16		1
13-67	EZ652410	Fuse Holder 3P Table	40-1-68	1
13-68x	EZ663480	Fuse Holder 2P Table (CSA)	40-1-73	1
13-69x	EZ655198	Fuse Holder 5P Base (CSA)	40-1-71	1
13-70x	EZ689545	2P Fuse Holder (Large) (1070) (CSA)	40-1-92	1
13-71 x	EZ692087	2P Fuse Holder (Small) (1070) (CEE)	40-1-93	1
13-72x	EZ691020	2P Fuse Holder (Small) (CEE)	40-1-89	1
13-73x	EZ691064	5P Fuse Holder (Small) (1070) (CEE) 2-throw Vol. V16L4GN	40-1-78	1
13-74x 13-75	EV656572 TA656583	100kBx2 (1080DB) Front End FL329U	36-22-15 57-2-36	2
13-75 13-76x	TA562735	Front End FB112U21	01 2 00	
10 / 01	1.1002.00	(1070)	57-2-29	1
13-77	MR656594	Pulley	2-14-32	1
13-78	TA676890	Dial Thread 1.9m		1
13-79x	ED539820	Peaking Coil 2.2µH(K) (1070)	23-1-187	1
13-80x	EA668755	Peaking Coil P.C Board (1070)	AA-5063	1
13-81	ES664222	Push SW. SDG5P	25-5-202	1
13-82x	ES665807	Push SW. SDG-5P (CEE)	25-5-182	1
13-83x 13-84x	EC551160 EC551160	Ceramic/C. NB821YZ 0.01μF(Z) 1.4 kWV Ceramic/C. NB821YZ	24-5-55	1
13-85x	ZS432674	0.01 $\mu$ F(Z) 1.4 kWV (CSA) Screw, pan head 3x3	24-5-55	2 2
13-86	MZ653411	Cushion 1	AA-5471	2
13-87	EJ656605	2-throw Jack	31-2-68	1
13-88x	ZS455207	Tapping Screw #2 3x5 (BR)		2
13-89x	MR530662	Roller B	91-5009	1
13-90x	ZS530684	Roller Screw B	91-5010	1
13-91	EV656616	Slide Vol. VJ308-45N25D2		
12.000	ZS432843	100 kB	36-21-3	1 2
13-92x 13-93	EV656627	Screw, pan head 2.6x4 Vol. V16L4N 10 kB	36-6-18	2
13-93 13-94x	TA674752	Cushion 3 (1080DB)	AA-5551	2
13-95x	TA695722	Cushion 4 (1080DB)	AA-5552	2
13-96	MS652724	Connector Shaft	AA-5455	3
13-97x	TA646773	Joint	AA-5240	3
13-98x	ZW270123	E' Ring 4M	6-1-9	6
13-99	BF671038	Flywheel Block Comp.		1
	x ZW610492	Nut MII	36-13-3	1
	TA665098	Scale Plate B (1070)	AA-5442	1
13-102	TA652623	Scale Plate Pointer	AA-5442 AA-5448	1
13-103	TA652757 x TA646784	Pointer Base	AA -5241	1
	x TA665572	Pointer Sheet	AA -5522	1
13-106	SP652364	Wall Plate A (Left)	AA-5458	1
13-107		Wall Plate B (Right)	AA-5458	1
13-108		Illumination Plate	AA-5444	1
	x EF658170	Fuse 8A 250V	39-1-50	1
	x EF575234	Fuse 6A 250V (1070)	39-1-50	1
	x EF668507	Fuse 3AG 125V 7A (CSA)	39-1-57	1
	x EF459843	Fuse ST-2 5A (1070) (CSA) Fuse ST-2 1A (CSA)	39-1-26 39-1-26	1
	x EF277402 x EF277413	Fuse ST-2 2A (1070) (CSA)	39-1-26 39-1-26	1 1
	x EF277413 x EF424811	Fuse ST-2 2.5A (CSA)	39-1-26	1
15.115.	127011	- 200 0 1 2 2101 (CDIL)	200	

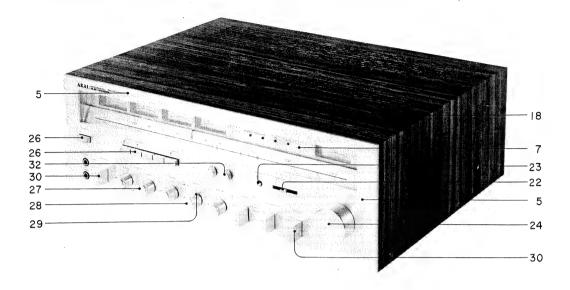
Ref. No.	Parts No.	Description	Schematic No.	Q'ty
13-116x	EF602550	Fuse 1.25AT 250V (Semko		
		T Type (1070) (CEE)	39-1-53	1
13-117x	EF601964	Fuse 1.6AT (Semko		
		T Type) (CEE)	39-1-53	1
13-118x	EF690996	Fuse 4AT (Semko T Type)		
		(CEE)	39-1-53	1
13-119x	EF691007	Fuse 3.15AT (Semko T		
		Type) (1070) (CEE)	39-1-53	1
13-120x	EF623103	Fuse 1AT (Semko T Type)		
		(CEE)	39-1-53	1
13-121x	EF601942	Fuse 630MAT (Semko		
		Type) (CEE)	39-1-53	4

### 13. ASSEMBLY BLOCK





#### 14. FINAL ASSEMBLY BLOCK



### 14) FINAL ASSEMBLY BLOCK

•				
Ref. No.	Parts No.	Description	Schematic No.	Q'ty
14-1x	BZ657562	Front Panel Block Comp.		1
14-2x	BZ657573	Front Panel Block Comp		
		(1080DB)		1
14-3x	BZ657551	Front Panel Block Comp.		
		(1070)		1
14-4x	SP656414	Front Panel A (1080DB)	AA-5463	1
14-5	SP656425	Front Panel B	AA-5465	1
14-6x	SP656436	Front Panel C (1070)	AA-5467	1
14-7	SZ652285	Front Glass	AA-5445	1
14-8x	ZG652713	Glass Retaining Spring	AA-5456	2
14-9x	SE653433	Escutcheon 1	TE-6313	1
14-10x	SE653444	Escutcheon 2	TE-6313	1
14-11x	SE653455	Escutcheon 3 (1070,		
		1080DB)	TE-6313	1
14-12x	SE631585	Button Escutcheon D	CG-6814	1
	ASSEMBLY	RLOCK		
14-13x		Bottom Plate	AA-5439	1
14-14x	SP676607	Bottom Plate B (CEE)		
17-174	51 0 7 0 0 0 7	(CSA)	AA-5439	1
14-15x	SZ651958	Fuse Cover	AA-5438	1
14-16x		Amp. Foot	98-5051	4
14-10X	ZS463375	Tapping Screw #2 4×15		-
14-1 / X	23403373	(Truss)		4
14-18	BC652634	, ,	AA-5440	1
14-19x	SE655108	Cabinet Rear Net	AA-5503	1
14-20x	ZW548010	Spot Facing Washer	MU-6028	4
14-21x	ZS558050	Screw, binding head 4×14		4
14-22	SK652386	Slide Knob	AA-5478	1
14-23	SK665223	Memory Cap A	AA-5521	1
14-24	SK647967	Tuning Knob (Large)	AA-5332	
14-25x		Set Screw, hexagon socket		
14-23A	25544105	4×6		1
14-26	SB679860	Push Button (Square)	TE-6320	6
14-27	SK646817	Single Knob	AA-5250	
14-28	SK644670	Double Knob (Upper)	AA-5355	2
14-29	SK645208	Double Knob (Lower)	AA-5353	
14-30	SK646830	Selector Knob	AA-5253	4
14-31x		Set Screw, hexagon socket		
1 T JIA		4×5		4
14-32	SK647548	Single Knob (Small)	CJ-6031	2
14-33x	SK677057	4 Ch Small Double Knob		
		(Upper) (1080DB)	AA-5548	4
14-34x	SK677046	4 Ch Small Double Knob		
		(Lower) (1080DB)	AA-5549	4

### 15 LIST OF INTERCHANGEABLE SEMICONDUCTORS

As far as service in concerned, in case the original parts cannot be obtained, the interchangeable parts listed below can be substituted.

	Original Parts		Interchangeable	Parts
Description Parts No. Utilizing P.C Board			Description	Parts No.
2SA640-1 (P) (Q)	ET661836	AA-5417	2SA564 (Q) (R) 2SA733 (Q) (R)	ET538154 ET538378
2SC1628 (O) (Y)	ET623035	AA-5417	2SC1124 (1) (2)	ET551564
2SC1222 (E) (F)	ET459810	AA-5401 AA-5404 AA-5406 AA-5405	2SC1000 (BL) (GR) 2SC1313 (G) (H)	ET622181 ET604124
2SC945L (P) (Q)	ET639437	AA-5401 AA-5415 AA-5407 AA-5408	2SC1647 (R) (S) 2SC711 (G) 2SC536 (E) (F)	ET658181 ET399870 ET370607
2SA733 (P) (Q)	ET554657	AA-5401 AA-5415 AA-5407	2SA628 (D) (E) 2SA564 (Q) (R)	ET538110 ET538154
2SA640 (F)	ET665842	AA-5401 AA-5403	2SA628 (D) (E) 2SA733 (Q) (R) 2SA564 (Q) (R)	ET538110 ET538378 ET538154
2SD313 (E) (F)	ET452531	AA-5415	2SD571 (L) (M)	ET655356
2SC1384 (P) (Q)	(P) (Q) ET658067 AA-5415 2SD400 (K) 2SC959 (L) (M)			ET631877 ET452597 ET430907
2SC930 (E) (F)	ET618873	AA-5307	2SC454 (B) (C) 2SC372 (Y)	ET591366 ET234808
2SC458LG (B) (C)	ET234843	AA-5403	2SC1000 (Y) (GR) 2SC693U (F) 2SC1312S (G) (H)	ET654862 ET315472 ET603257
2SC1000 (BL) (GR)	ET622181	AA-5403	2SC458LG (C) 2SC1222 (E) (F)	ET234854 ET459810
2SC945L (K) (P) (Q) (R)	ET635218	AA-5507 AA-5412	2SC1647 (R) (S) 2SC536 (E) (F) 2SC711 (G)	ET658181 ET370607 ET399870
2SC1520-3 (L) (K)	ET656267	AA-5417		
2SB548 (P) (Q)	ET656910	AA-5415		
S-60W	EI656256	AA-5417		
S-40W	EI656245	AA-5417		
CX-050	EI656976	AA-5401		
CX-049	EI656965	AA-5401		
CX-718	EI656987	AA-5401	·	
CD4-392	EI656998	AA-5401		
TA7129P	EI657000	AA-5401		-
LA-1230	EI650586	AA-5407		
LA3350A	EI650597	AA-5407		
μPC-30C	EI650362	AA-5407		

	Original Parts	·	Interchangeal	ole Parts
Description	Parts No.	Utilizing P.C Board	Description	Parts No.
1S2473VE	ED560913	AA-5401	1S1588	ED557447
1S2473F	ED657022	AA-5415	WG599	ED514721
1S2472VE	ED656278	AA-5407	WG713	ED515990
10D1	ED224526	AA-5415	1N4001	ED538615
10D2	ED224548	AA-5410 AA-5415	1N4003	ED570295
1S188AM	ED562386	AA-5406 AA-5408	1N34A	ED417442
1T243M-47	ED657011	AA-5401		
WZ-120	ED510772	AA-5401 AA-5408		
WZ-162	ED494627	AA-5415		
WZ-130	ED539976	AA-5415		
SEL305GL	ED656346	AA-5413		
SEL105R	ED656357	AA-5413		
S5188	ED656234	AA-5410		
HIFI 400V 3A (SPECIAL)	ED558033	AA-5410		

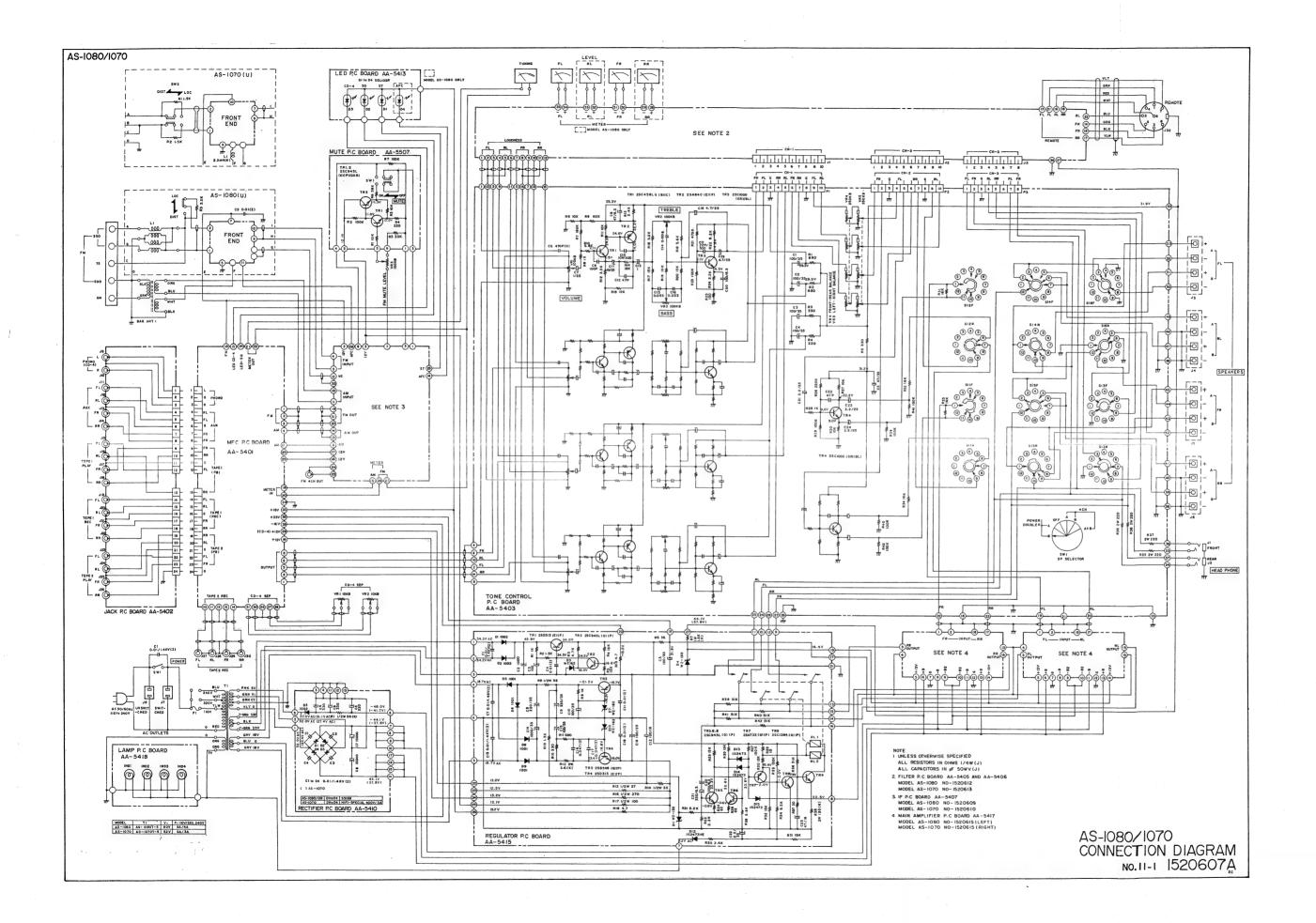
# INDEX

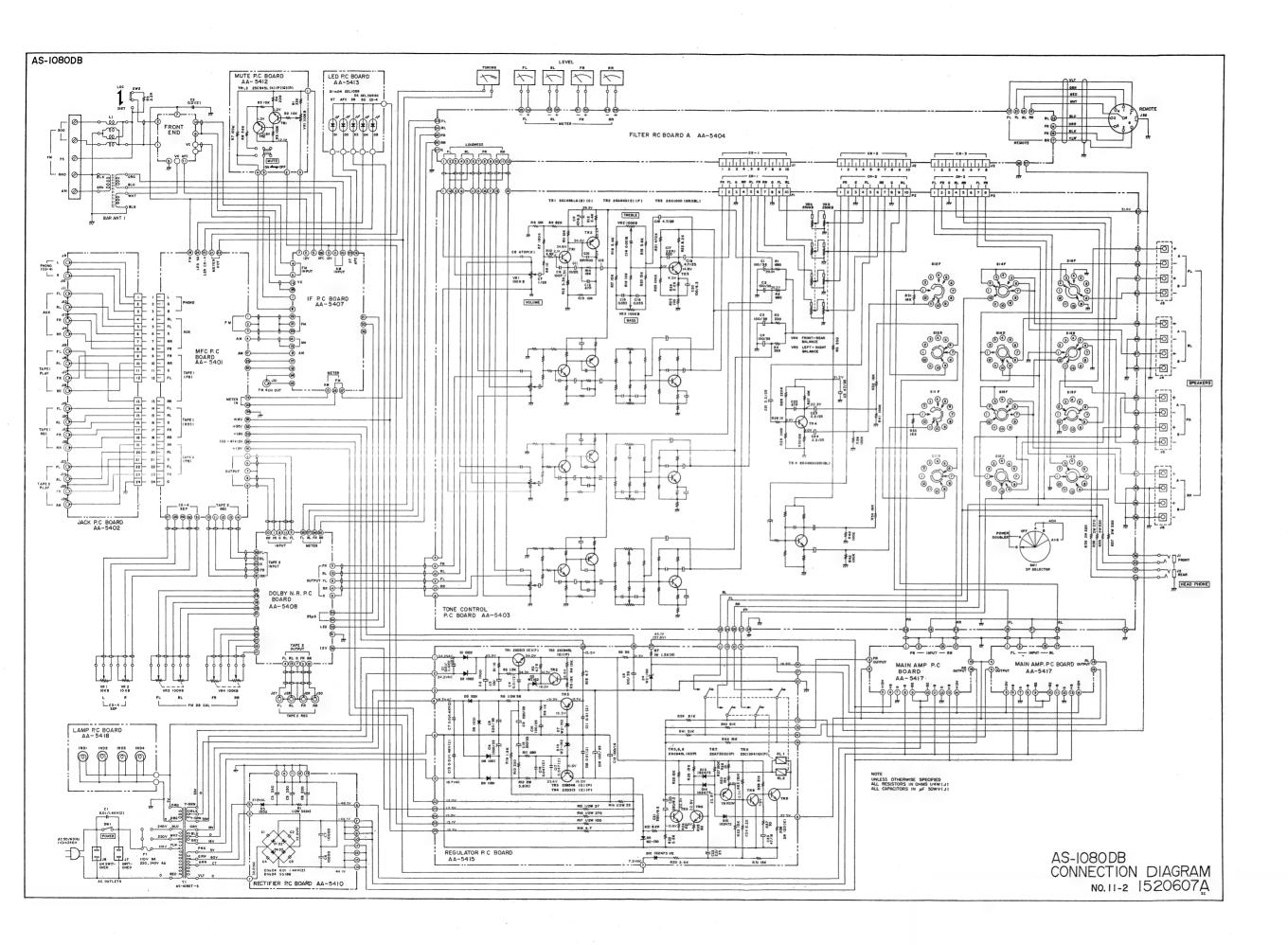
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Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.	Parts No.	Ref. No. & Symbol No.
BA657617 BA657628 BA657630 BA657663 BA657674 BA657685 BA657696 BA657707 BA657720 BA657731	10-3 10-1 10-2 3-1 4-3 4-1 4-2 11-1 12-1 2-2	ED510772 ED539820 ED539976 ED558033 ED560913 ED560913 ED560913 ED560913 ED560913	3-D2 13-79x 8-D4 8-D11 9-D1to4 1-D1to6 1-D10 1-D13 7-D1 8-D12to14	ER658091 ER658124 ER658124 ES656335 ES656728 ES656730 ES656741 ES656820 ES656831 ES657050	8-R38 5-R10 6-R6 13-44 4-SW1 4-SW1 11-SW1 11-SW1 1-SW3	EZ655187 EZ655198 EZ656458 EZ663480 EZ689545 EZ691020 EZ691064 EZ692087 MB650147 MR530651	13-40 13-69x 13-27x 13-68x 13-70x 13-72x 13-73x 13-71x 13-7x 13-52x	ZS432674 ZS432843 ZS447761 ZS447761 ZS447840 ZS4455207 ZS463353 ZS463375 ZS530673	13-85x 13-92x 13-17x 13-39x 8-4 13-54x 13-88x 13-45x 14-17x 13-53x
BA657742 BA657753 BA657764 BA657775 BA657808 BA657810 BA657865 BA657876 BA670500 BA670511	2-1 7-3 7-1 7-2 1-1 1-4 6-1 5-1 2-4 2-3	ED562386 ED562386 ED562386 ED562386 ED650823 ED656234 ED656278 ED656278 ED656278 ED656278	3-D1 4-D1,2 4-D1to4 4-D1to8 6-L1 9-D1to4 5-D1,2 6-D1,2 8-D15 1-D7to9	ES657077 ES657088 ES658884 ES664222 ES665807 ET234843 ET452531 ET452531 ET452531 ET459810	1-SW1 1-SW2 3-SW1 13-81 13-82x 2-TR1 8-TR1 8-TR4 1-TR1to4 1-TR13	MR530662 MR656594 MS652724 MZ653411 MZ665032 MZ669150 MZ669161 MZ669172 MZ669183 MZ669194	13-89x 13-77 13-96 13-86 13-15 13-30x 13-31x 13-31x 13-34x 13-32x	ZS530684 ZS558050 ZS593201 ZW270123 ZW273756 ZW273756 ZW274026 ZW379394 ZW413278 ZW462688	13-90x 14-21x 13-66x 13-98x 13-21x 13-42x 13-62x 13-4x 13-63x 13-61x
BA670522 BA680758 BA680760 BA680771 BA680815 BC652634 BF671038 BT444137 BT656550 BT663478	1-2 8-1 9-2 9-1 1-3 14-18 13-99 13-43 13-56x 13-58x	ED657022 ED657022 ED657033 ED694091 ED694091 ED694091 EF277402 EF277413 EF424811 EF459843	1-D11,12 1-D14to18 1-V1to4 10-D1 10-D1to4 10-D3,4 13-113x 13-114x 13-115x 13-112x	ET459810 ET459810 ET460912 ET554657 ET554657 ET5554657 ET557965 ET618873 ET622181 ET623035	1-TR21 4-TR1 1-TR22 1-TR11 1-TR19 8-TR7 7-TR9 7-TR2,3 2-TR3,4 5-TR3,4	MZ669205 SA545005 SB679860 SE631585 SE653433 SE653444 SE653445 SE655108 SK644670 SK6445208	13-35x 14-16x 14-26 14-12x 14-9x 14-10x 14-11x 14-19x 14-28 14-29	ZW548010 ZW610492 ZW632226 ZW651082	14-20x 13-100x 8-2 13-24x
BT668248 BT669216 BT674526 BT691018 BZ657551 BZ6575562 BZ657573 EA652454 EA652476 EA652803	13-55 13-57x 13-60x 13-59x 14-3x 14-1x 14-2x 13-5 13-8 13-12x	EF575234 EF601964 EF601942 EF602550 EF623103 EF658170 EF668507 EF690996 EF691007 EI605013	13-110x 13-117x 13-121x 13-116x 13-120x 13-109x 13-111x 13-118x 13-119x 3-IC1	ET623035 ET635218 ET635218 ET639437 ET639437 ET639437 ET639437 ET639437 ET639437	6-TR3 11-TR1,2 12-TR1,2 1-TR5to10 1-TR12 1-TR15to18 1-TR20 1-TR23to25 3-TR1 7-TR1	SK646817 SK646830 SK647548 SK647967 SK652386 SK652397 SK665223 SK677046 SK677057 SP652331	14-27 14-30 14-32 14-24 14-22 13-23 14-23 14-34x 14-33x 14-13x		
EA668755 EC516756 EC516767 EC522167 EC522167 EC522167 EC522516 EC522516 EC523282 EC523282	13-80x 1-C140 3-C22 1-C102 1-C169 7-C23 7-C29,30 1-C85 1-C155 3-C4	E1650362 E1650586 E1650597 E1656245 E1656256 E1656958 E1656958 E1656958 E1656958	7-IC3 7-IC1 7-IC2 13-2x 13-3 1-IC7 1-IC4 1-IC2 1-IC1 1-IC3	ET639437 ET639437 ET639437 ET639437 ET639437 ET655615 ET6556267 ET656267 ET656910 ET658067	7-TR4to8 7-TR8 8-TR2 8-TR5,6 8-TR8 2-TR8 2-TR2 5-TR5 6-TR4 8-TR3 8-TR9	SP652364 SP652375 SP656381 SP656392 SP656403 SP656414 SP656425 SP656436 SP656447 SP665998	13-106 13-107 13-47x 13-48 13-49x 14-4x 14-5 14-6x 13-9 13-10x		
EC523282 EC523282 EC523282 EC551160 EC551160 EC604440 EC604440 EC604440 EC604440	3-C10 7-C11 7-C43 13-83x 13-84x 1-C103 1-C170 3-C9 7-C16 7-C27	EI657000 EJ354936 EJ650261 EJ655683 EJ656280 EJ656291 EJ656605 EJ656785 EJ656796 EJ656886	1-IC5,6 13-16 13-22 13-19 13-11 13-13x 13-87 4-J1,2 4-J3 2-P1,2	ET658102 ET661836 ET661836 ET665842 EV484863 EV484863 EV499364 EV499364 EV499364	3-TR2 5-TR1,2 6-TR1,2 1-TR14 4-VR1t04 7-VR1 1-VR1,2 5-VR2 6-VR2 7-VR2	SP676607 SZ651958 SZ652285 TA530910 TA562735 TA646773 TA646784 TA652320 TA652623 TA652678	14-14x 14-15x 14-7 13-38 13-76x 13-97x 13-104x 13-108 13-102 10-4		
EC621257 EC650406 EC656561 EC657055 EC657055 EC657066 EC657066 EC658001 EC662126 EC662128	7-C22 7-C33 13-64 1-C97 1-C164 1-C106 1-C174 7-C33 1-C101 1-C168	EJ656897 EL668362 EM650226 EM650902 EO560610 EO645838 EO650373 EO650384 EO650395 EO650608	2-P3 13-6 13-51 13-50 7-L1 7-T3 7-T4 7-T2 7-T3 7-T1	EV520806 EV560136 EV604438 EV604484 EV604484 EV656572 EV656616 EV656627 EV656818 EV656842	1-VR3to7 3-VR2 3-VR3 5-VR1 6-VR1 13-74x 13-91 13-93 12-VR1 2-VR1	TA652691 TA652757 TA656313 TA656324 TA656583 TA665098 TA665572 TA674752 TA676890 TA695722	13-46x 13-103 13-36 13-37x 13-75 13-101x 13-105x 13-94x 13-78 13-95x		
EC666483 ED224526 ED224526 ED224548 ED224548 ED485370 ED494627 ED494627 ED494627 ED510772	7-C21 8-D5,6 8-D8,9 8-D1,2 9-D5 3-TH1 8-D3 8-D7 8-D10 1-D19	E0650823 E0656932 E0656943 E0656943 E0656954 EP638763 ER650430 ER650430 ER656908 ER656921	5-L1 1-L3,4 1-L1,2 1-L5,6 1-L7,8 8-RL1,2 7-FL1,2 7-FL1,0 7-FL4 8-R12	EV656853 EV656864 EV656876 EV658895 EW374894 EW516600 EZ652162 EZ652410 EZ652410 EZ654941 EZ654952	2-VR4,5 2-VR2,3 2-VR2,3 3-VR1 13-25 13-26x 13-1 13-67 13-28 13-29x	ZG652713 ZS325495 ZS325495 ZS344463 ZS344531 ZS366120 ZS379350 ZS393794 ZS393794 ZS393794	14-8x 10-5 13-65x 14-25x 14-31x 13-14x 8-3 13-18x 13-20x 13-41x		

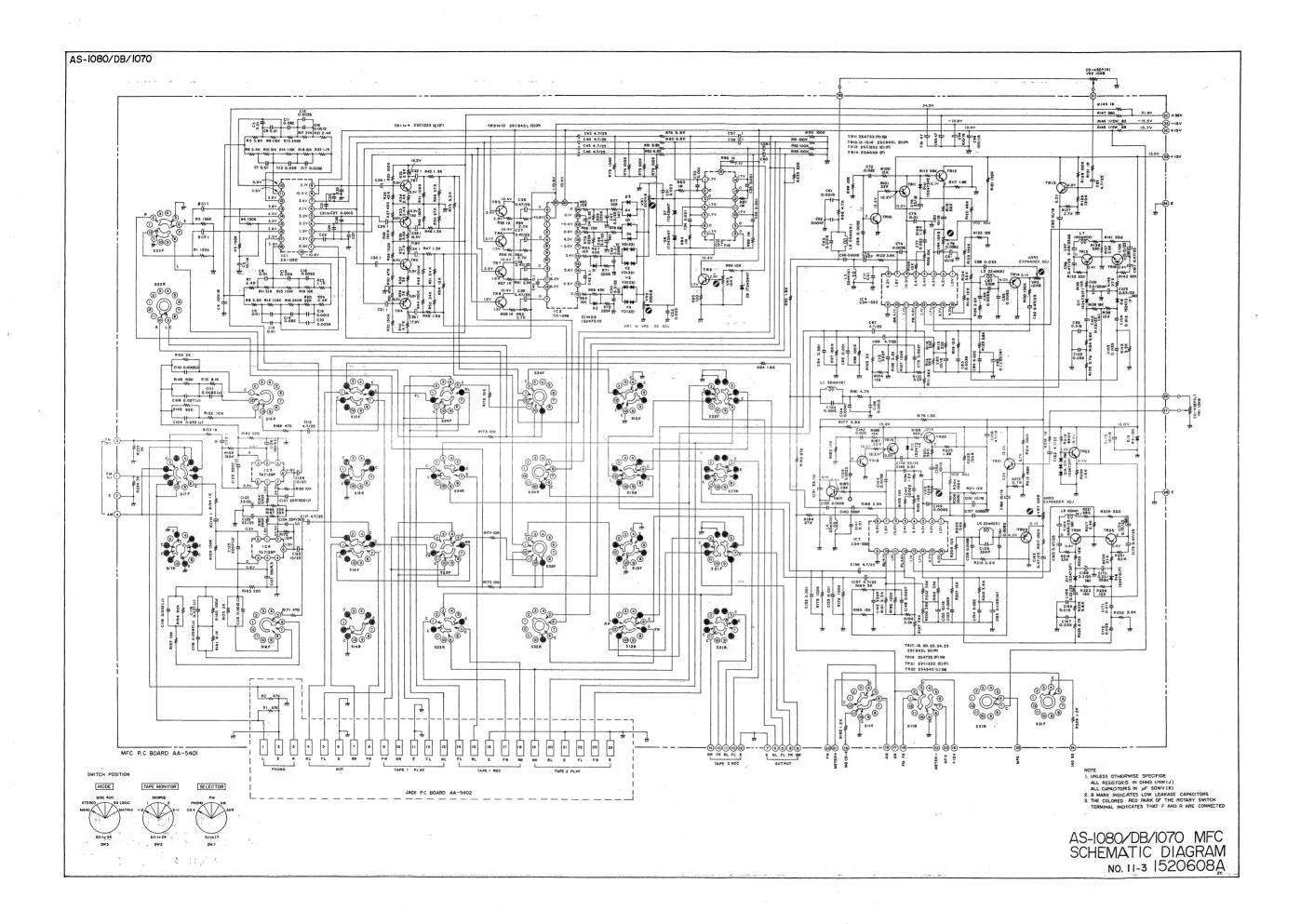
### SECTION 3

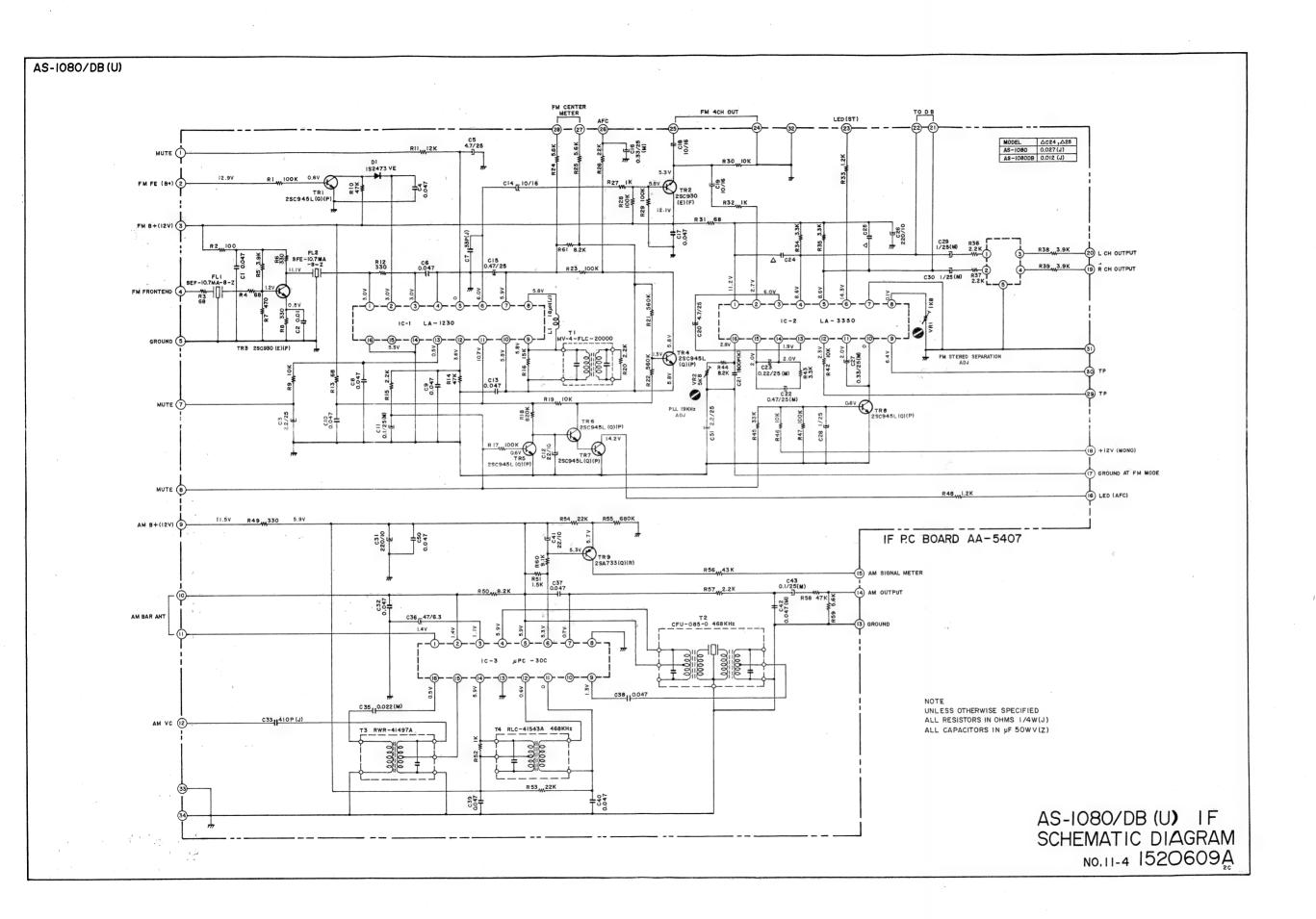
## **SCHEMATIC DIAGRAM**

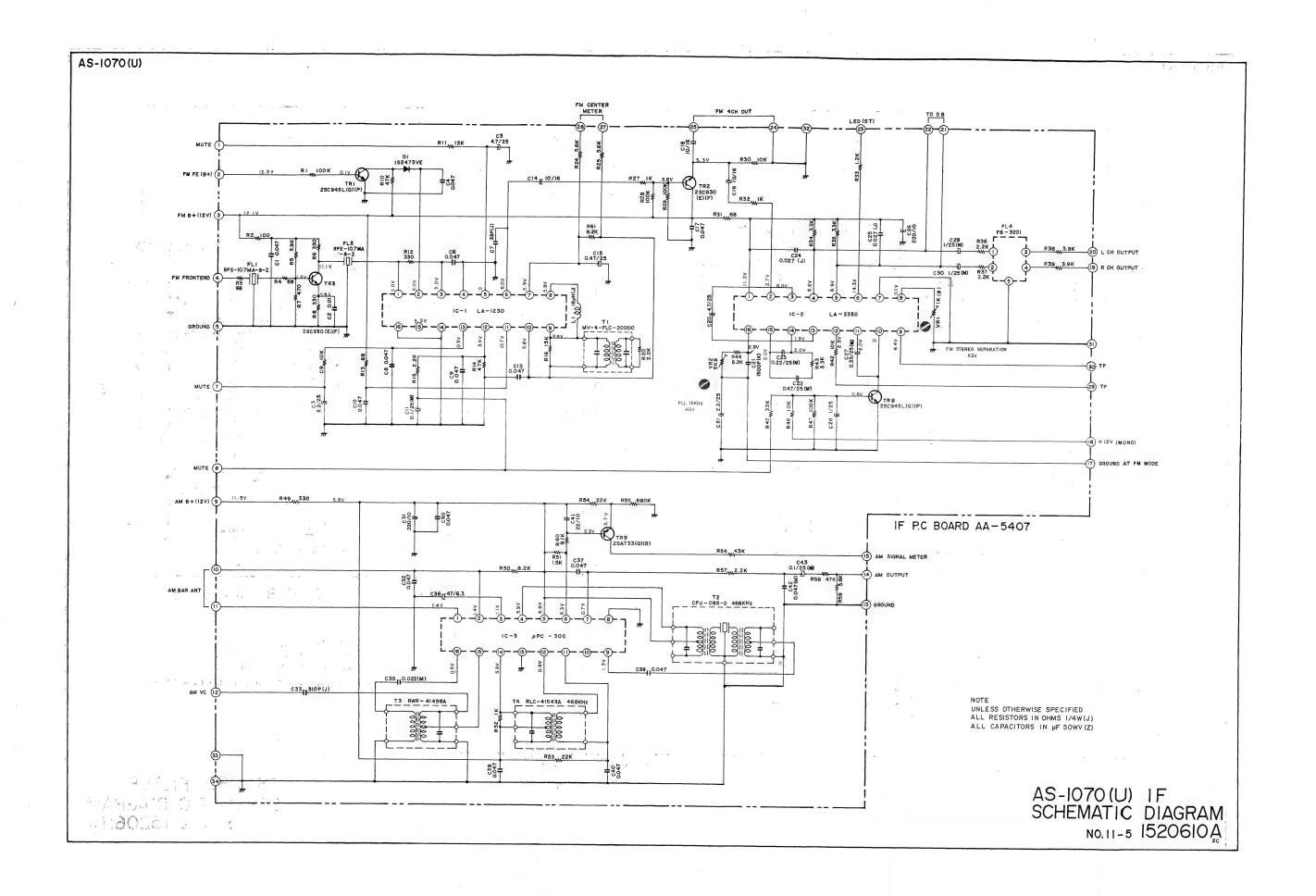
1.	AS-1080/1070	CONNECTION DIAGRAM	No. 11-1	1520607A
2.	AS-1080DB	CONNECTION DIAGRAM	No. 11-2	1520607A
3.	AS-1080/DB/			
	1070	MFC SCHEMATIC DIAGRAM	No. 11-3	1520608A
4.	AS-1080/DB			
	(U)	IF SCHEMATIC DIAGRAM	No. 11-4	1520609A
5.	AS-1070 (U)	IF SCHEMATIC DIAGRAM	No. 11-5	1520610A
6.	AS-1080	FILTER SCHEMATIC DIAGRAM	No. 11-6	1520611A
7.	AS-1080DB	FILTER SCHEMATIC DIAGRAM	No. 11-7	1520612A
8.	AS-1070	FILTER SCHEMATIC DIAGRAM	No. 11-8	1520613A
9.	AS-1080DB	DOLBY N.R. SCHEMATIC DIAGRAM	No. 11-9	1520614A
10.	AS-1080/DB/			
	1070	MAIN AMP SCHEMATIC DIAGRAM	No. 11-10	1520615A
11.	AS-1080/DB/			
	1070	POWER TRANS SCHEMATIC DIAGRAM	No. 11-11	1520616A

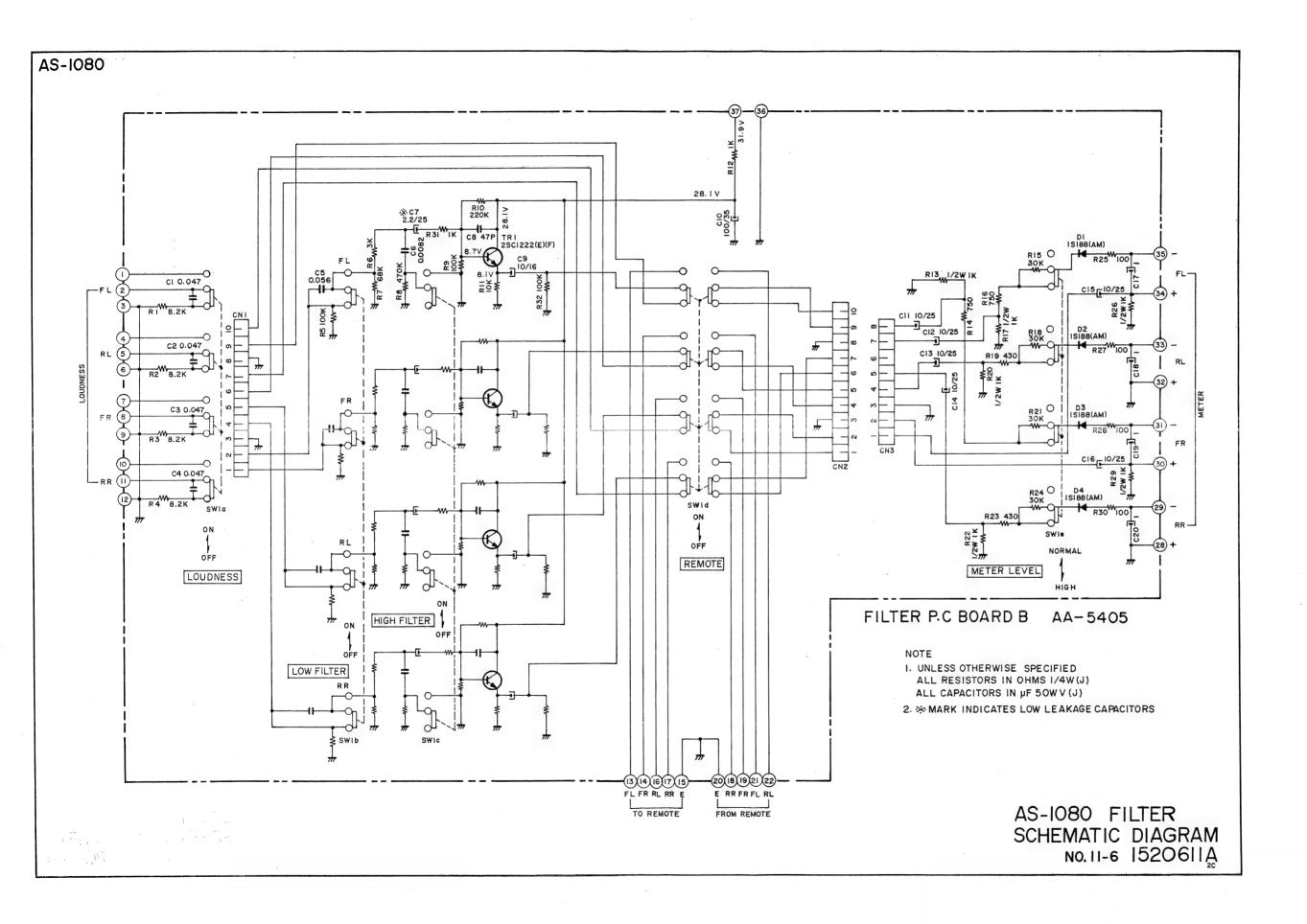


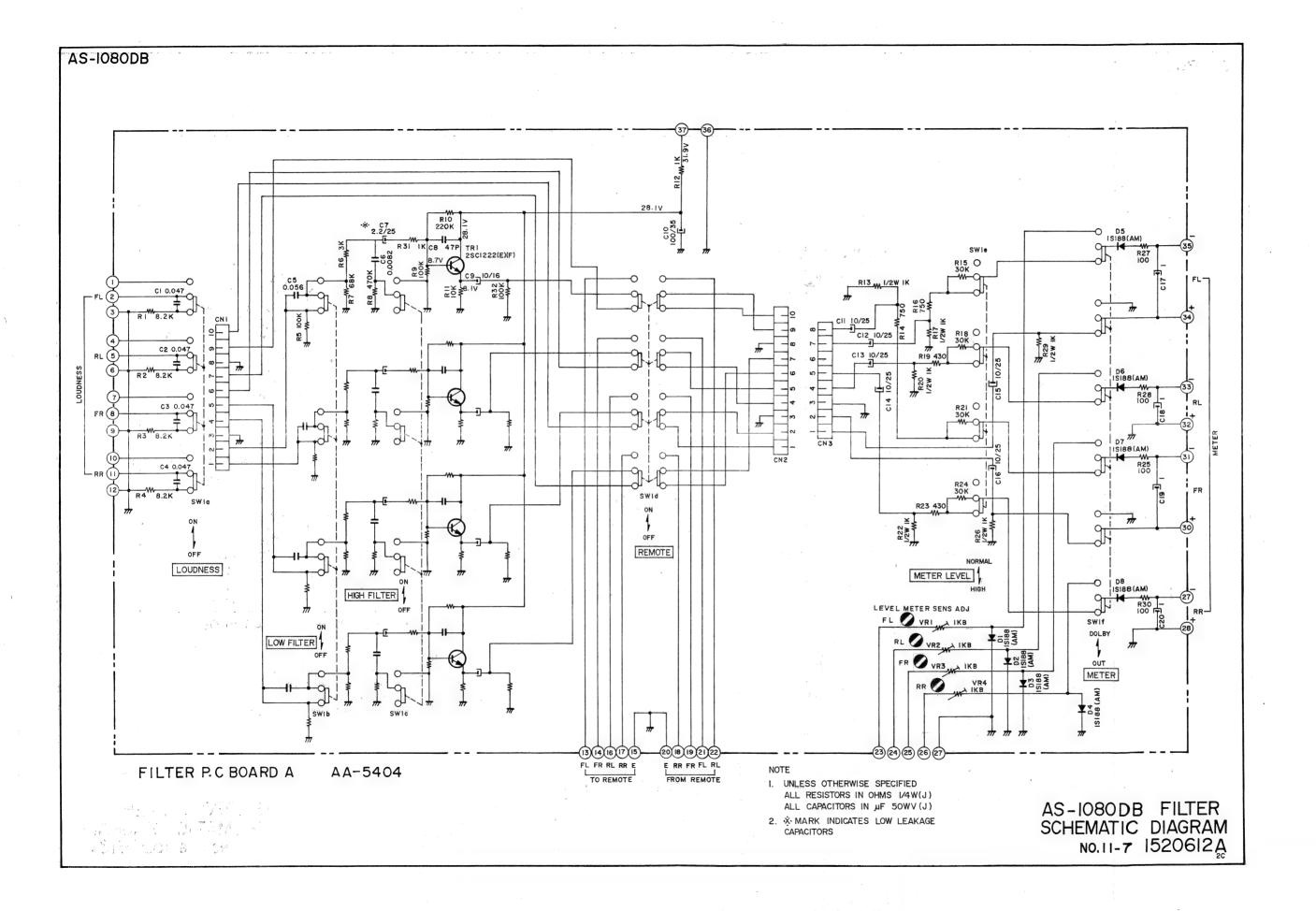


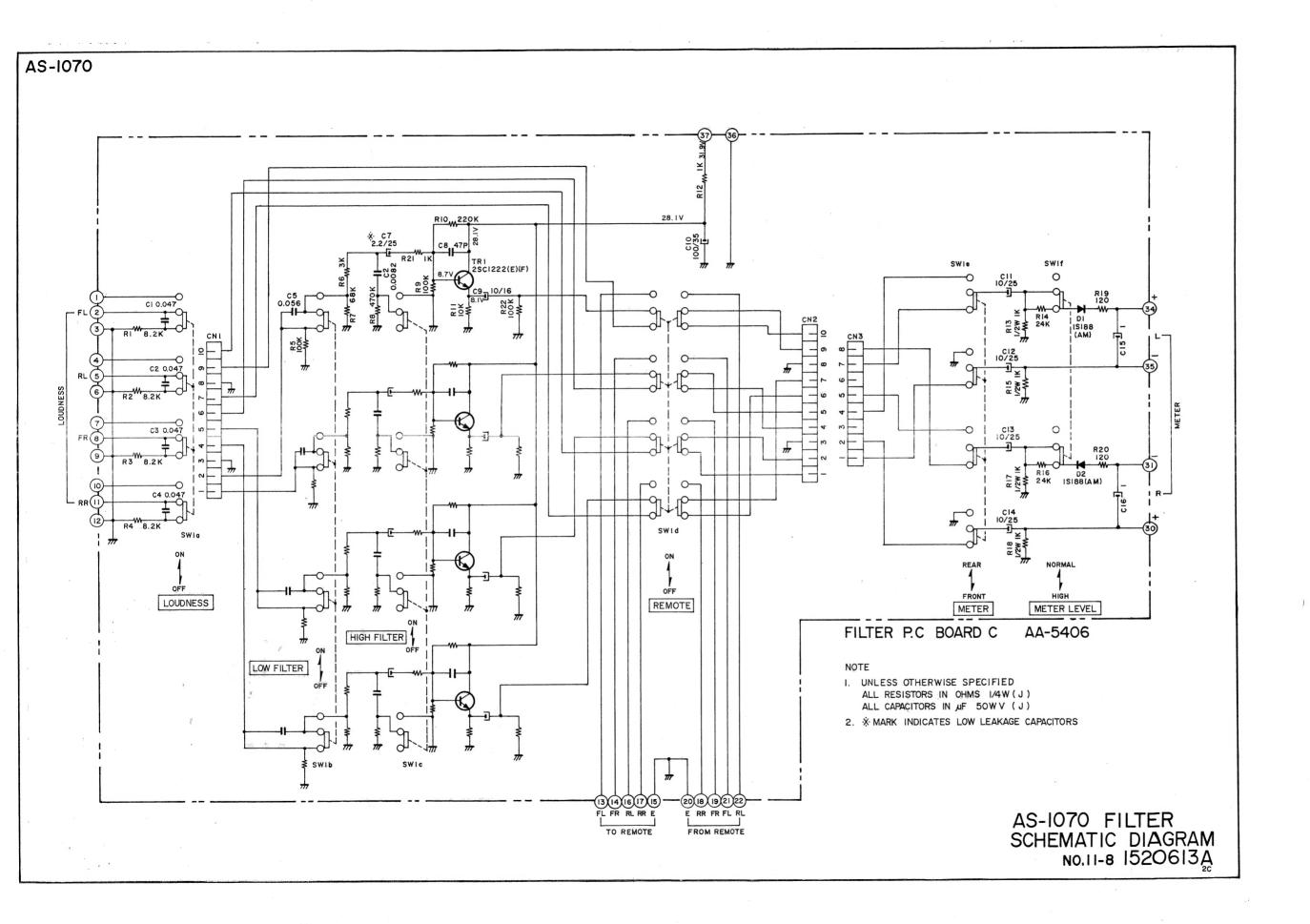


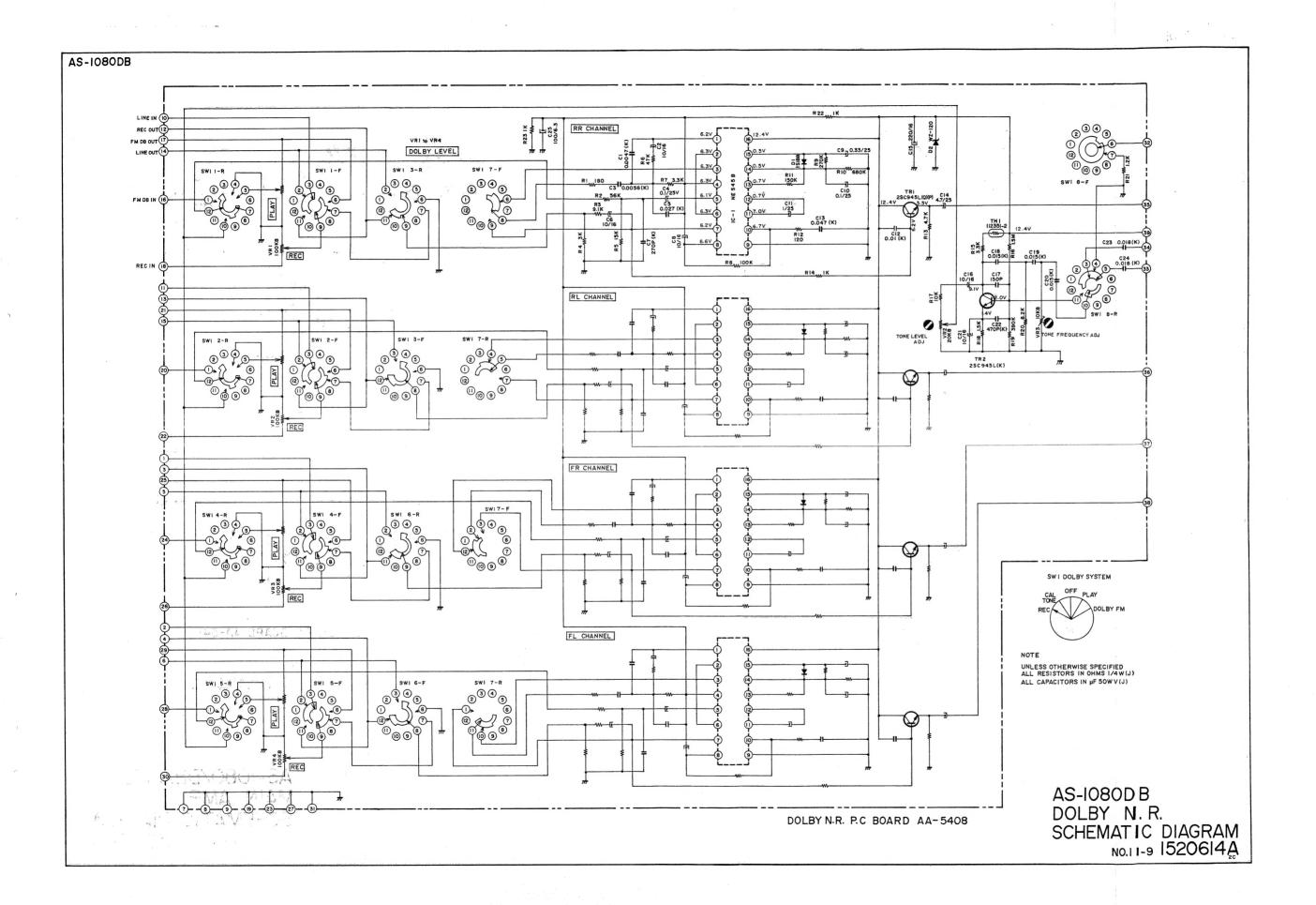




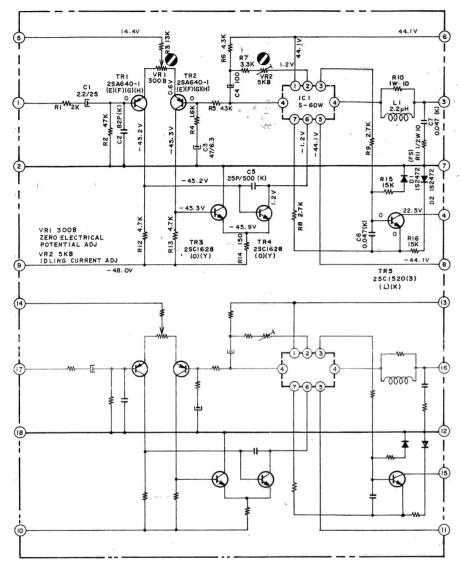




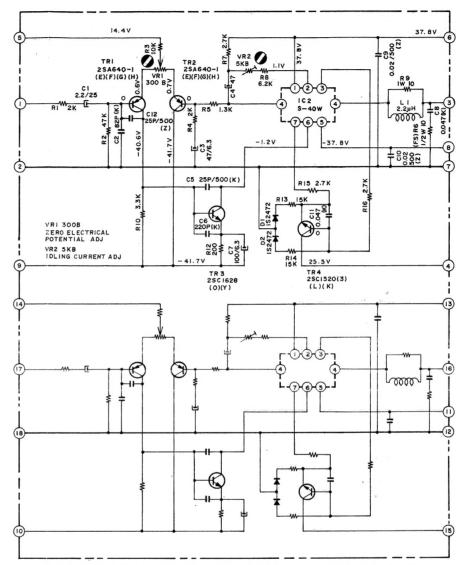




#### AS-1080/DB/1070



AS-1080/DB MAIN AMPLIFIER P.C BOARD AA-5417



AS-1070 MAIN AMPLIFIER P.C BOARD AA-5417

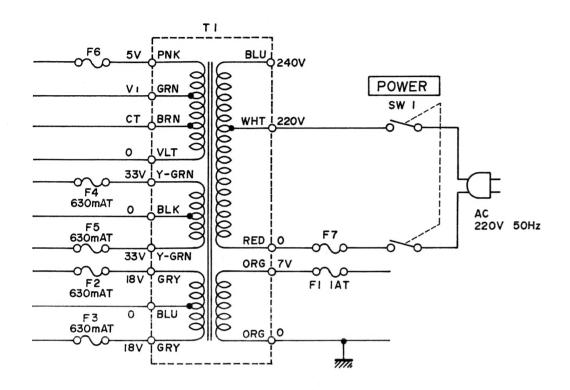
NOTE

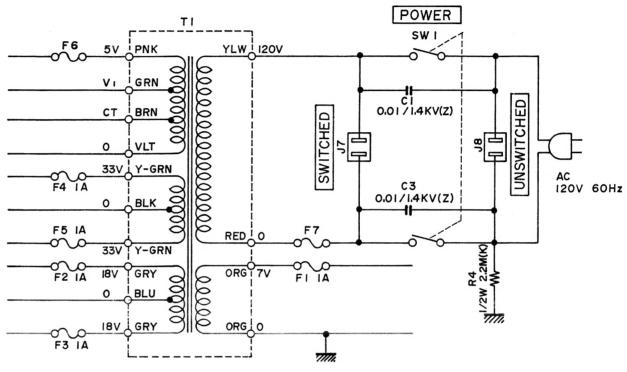
I. UNLESS OTHERWISE SPECIFIED ALL RESISTORS IN OHMS 1/4W(J) ALL CAPACITORS IN JF 50WV(J)

2. FS = FAIL SAFE RESISTOR

AS-1080/DB/1070 MAIN AMP SCHEMATIC DIAGRAM NO.11-10 1520615A

### AS-1080/DB/1070





# CEE

MODEL	ΤI	٧ı	F6	F7
AS-1080/DB	AS-1080T-3	60V	I.6AT	4AT
AS - 1070	AS-1070T-3	52 V	I.25AT	3.15AT

### CSA

MODEL	TI	٧ı	F6	F7
AS-1080/DB	AS-1080T-2	60 V	2.5A	7A
AS-1070	AS-1070T-2	52V	2 A	5 A

NOTE
POWER TRANSFORMER BLOCK IS
DIFFERENT ACCORDING AREA

AS-1080/DB/1070 POWER TRANS SCHEMATIC DIAGRAM NO.11-11 1520616A